5.3.5 PORTS

RFA PORTS processing provides the user with the capabilities to administer the PORTS reference file. The RFA main menu, RFA - Select File window, is shown in Figure 5.3.5-1. To access the PORTS file, highlight the **{Seaports File}** option in the list box on the left. Then click the applicable button on the right to select the particular PORTS function desired.

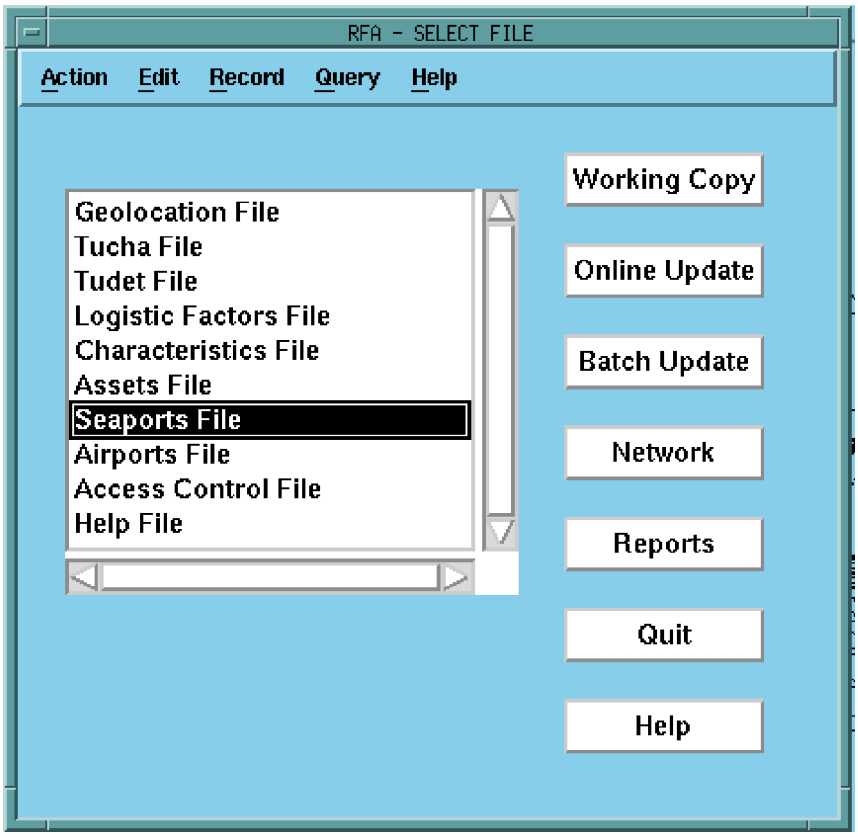

Figure 5.3.5-1. Select Seaports File from RFA Main Menu Window

Push Buttons. This window provides the following buttons:

{Working Copy} Copies the PORTS reference from the JOPES Core database to the RFA database (See Paragraph 5.3.5.1).

{Online Update} This function is not provided at this time.

{Batch Update} Provides the user with the capability to process JRS transaction files (See Paragraph 5.3.5.2).

{Network} Consolidates all updates that have occurred since the last Working Copy, and generates an ORACLE script for use in updating the PORTS file at all JOPES Core database sites (See Paragraph 5.3.5.3).

{Reports} Brings up a menu of available PORTS and general reports (See Paragraph 5.3.5.4).

{Quit} Terminates PORTS processing, and invokes session control processing prior to ending RFA.

{Help} Provides Online Help for the RFA main menu.

5.3.5.1 PORTS Working Copy

The PORTS Working Copy function copies the live PORTS file from the user's local node JOPES Core database into the local PORTS file in the RFA database. This function is called when highlighting the **{Seaports File}** option and clicking **{Working Copy}** from the RFA main menu (See Figure 5.3.5-1). When this function is called, an alert pop-up window appears, as shown in Figure 5.3.5.1-1, to warn the user that the Working Copy may take a considerable amount of time. The length of time required is a function of the hardware configuration and GCCS workload.

Push Buttons. This window provides the following buttons:

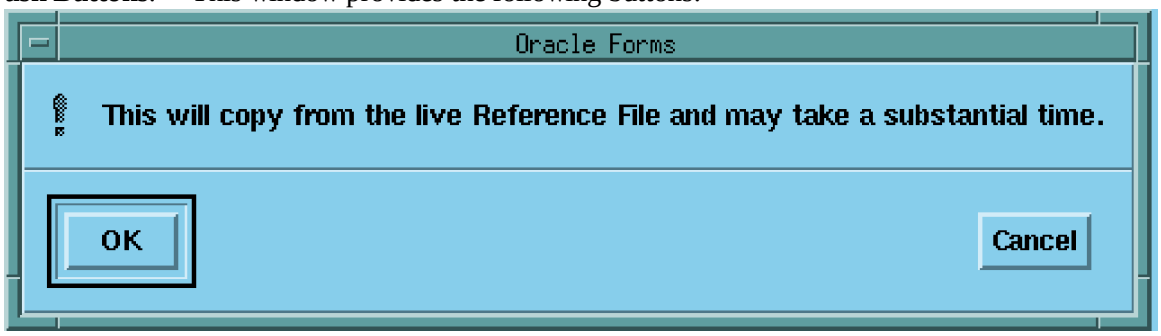

Figure 5.3.5.1-1. Alert Pop-Up Window

{OK} Continues the Working Copy function.

{Cancel} Cancels the Working Copy, and returns the user to the RFA main menu.

If there have been updates to the PORTS file since the last Working Copy, which have not been processed by the Network function, an alert pop-up, as shown in Figure 5.3.5.1-2, indicates that continuation of this process will cause changes to be lost.

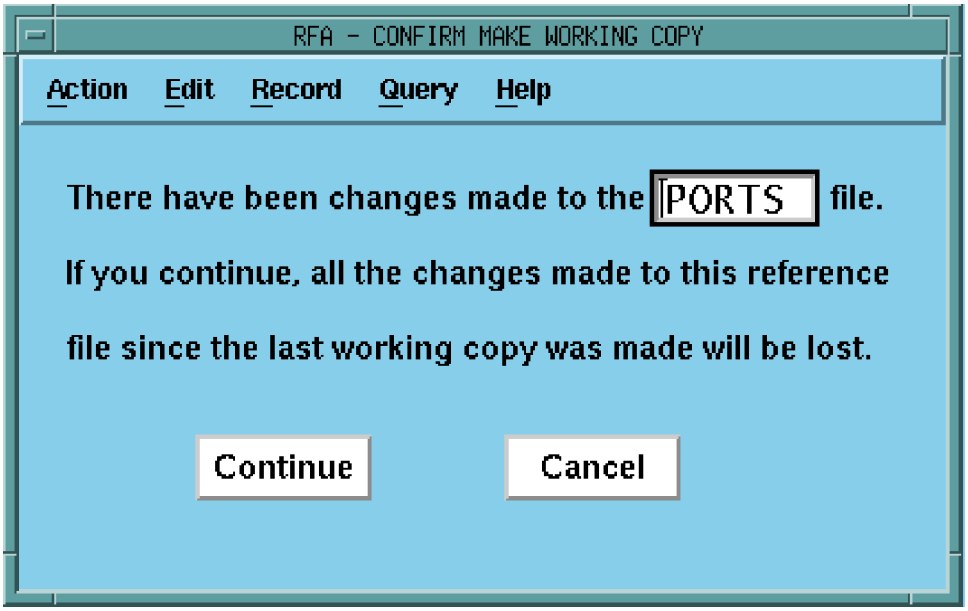

Figure 5.3.5.1-2. Alert Pop-Up Window - RFA - Confirm Make Working Copy

Push Buttons. This window provides the following buttons:

{Continue} Continues the Working Copy function.

{Cancel} Cancels the Working Copy, and returns the user to the RFA main menu.

At this point, a wait pop-up window appears, as shown in Figure 5.3.5.1-3, advising the user to wait until the Working Copy process is complete. At the completion of the Working Copy, the user is returned to the RFA main menu.

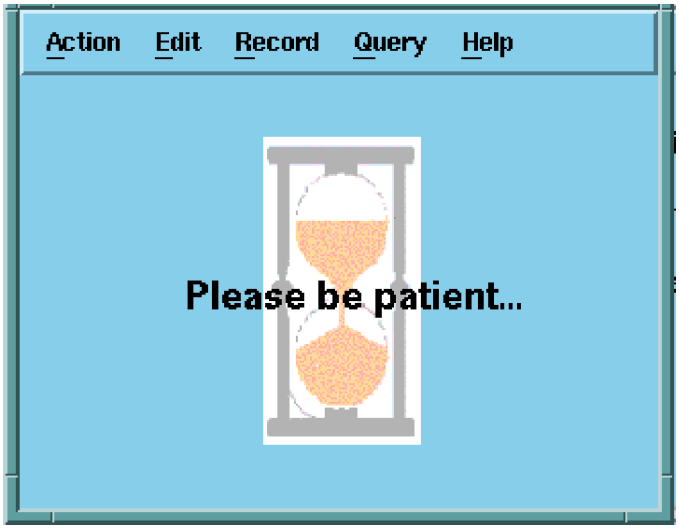

Figure 5.3.5.1-3. Wait Pop-Up Window - Please Wait

5.3.5.2 PORTS Batch Process Overview

PORTS batch software provides the capability to process PORTS input transactions in a batch mode. The PORTS data, which must conform to JRS standards, are required in the development and evaluation of joint Operation Plans (OPLANs) and submitted by the Chief of Naval Operations (CNO) and the Defense Intelligence Agency (DIA). The PORTS CNO data consists of information concerning physical and operating characteristics of ports in the United States and its territories and possessions, while the PORTS DIA data consists of information concerning selected Free World ports. The data includes any port, which can accommodate the smallest commercial cargo ship and is available for use by the DOD.

PORTS batch software loads the CNO input transactions and the DIA input file into the RFA ORACLE database. The software performs JRS format and JRS data edits on the CNO input transactions, and subsequently loads the CNO data into the CNO tables in the RFA ORACLE database. The software deletes all records from the PORTS tables in the RFA ORACLE database, performs data edits on the DIA data, and subsequently loads the DIA data into the PORTS tables in the RFA ORACLE database. The batch software merges the data in the CNO tables with the data in the PORTS tables. Therefore, the RFA PORTS database is rebuilt from scratch, whenever a PORTS batch update is processed. The following paragraphs describe the specific software capabilities for each PORTS batch window:

- RFA - Select File (See Paragraph 5.3.5.2.1),
- RFA - PORTS Transaction Options (See Paragraph 5.3.5.2.2),
- RFA - PORTS DIA and CNO Transaction Options (See Paragraph 5.3.5.2.3),
- RFA - PORTS Input Transaction Load Error (See Paragraph 5.3.5.2.3.1),
- RFA - PORTS DIA Load Error (See Paragraph 5.3.5.2.3.2),
- RFA - PORTS DIA CNO Load Error (See Paragraph 5.3.5.2.3.3),
- RFA - JRS Load Results (See Paragraph 5.3.5.2.4),
- RFA - JRS Transaction Listing Options (See Paragraph 5.3.5.2.5),
- RFA - JRS Edit Results (See Paragraph 5.3.5.2.6),
- RFA - Printer Selection (See Paragraph 5.3.5.2.6.1),
- RFA - PORTS Data Edits (See Paragraph 5.3.5.2.7),
- RFA - PORTS CNO Data Edit Results (See Paragraph 5.3.5.2.8),
- RFA - Printer Selection (See Paragraph 5.3.5.2.8.1),
- RFA - PORTS DIA Data Edit Results (See Paragraph 5.3.5.2.9),
- RFA - RFA - Printer Selection (See Paragraph 5.3.5.2.9.1),
- RFA - PORTS DIA Transaction Options (See Paragraph 5.3.5.2.10),
- RFA - JRS Load Results (See Paragraph 5.3.5.2.11), and
- RFA - PORTS DIA Data Edit Results (See Paragraph 5.3.5.2.12).

5.3.5.2.1 RFA - Select File

The user initiates PORTS batch processing from the RFA - Select File window shown in Figure *5*.3.5.2.1-1. Highlighting the **{Seaports File}** option and clicking **{Batch Update}** on the right side of the window causes the RFA - PORTS Transaction Options window to appear (See Paragraph 5.3.5.2.2).

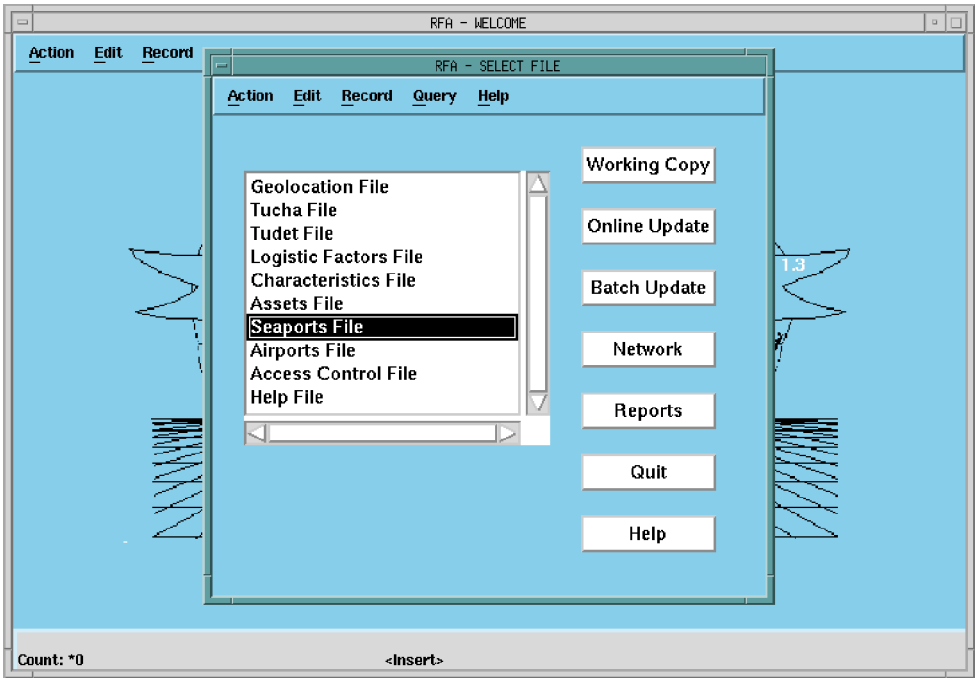

Figure 5.3.5.2.1-1. RFA - Select File Window

5.3.5.2.2 RFA - PORTS Transaction Options

The RFA - PORTS Transaction Options window, shown in Figure 5.3.5.2.2-1, provides the user with the option to select which mode the PORTS data are submitted.

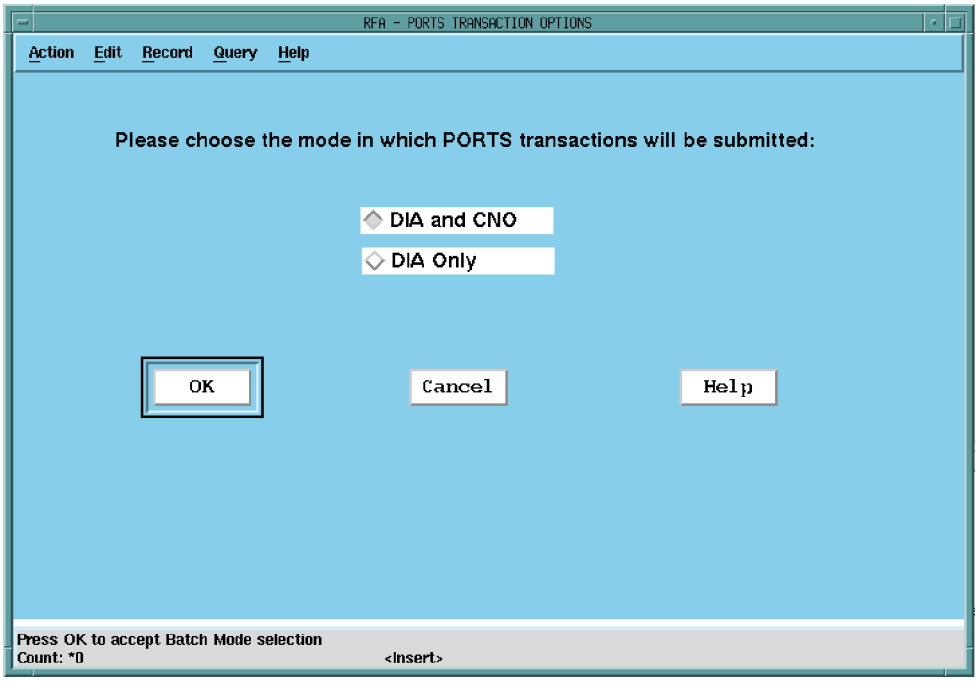

Figure 5.3.5.2.2-1. RFA - PORTS Transaction Options Window

Radio Buttons. This window provides access to the following radio buttons:

{DIA and CNO} Selects this box when both DIA and CNO data are submitted.

{DIA Only} Selects this box when only DIA data are submitted.

Push Buttons. This window provides access to the following buttons:

{OK} Logs the method by which PORTS data are submitted. If the **{DIA and CNO}** radio button is highlighted, the RFA - PORTS DIA and CNO Transaction Options window appears (See Paragraph 5.3.5.2.3). If the **{DIA Only}** radio button is highlighted, the RFA - PORTS DIA Transaction Option window appears (See Paragraph 5.3.5.2.10).

{Cancel} Exits the PORTS batch process, and returns the user to the RFA - Select File window.

{Help} This button is currently inactive.

5.3.5.2.3 RFA - PORTS DIA and CNO Transaction Options

The user must enter both the DIA and CNO input transaction file names in the transaction file input boxes of the RFA - PORTS DIA and CNO Transaction Options window shown in Figure 5.3.5.2.3-1. These flat, ASCII-encoded files are submitted by the CNO and the DIA. These files must be stored in the *rfa_net* directory under the user's home directory.

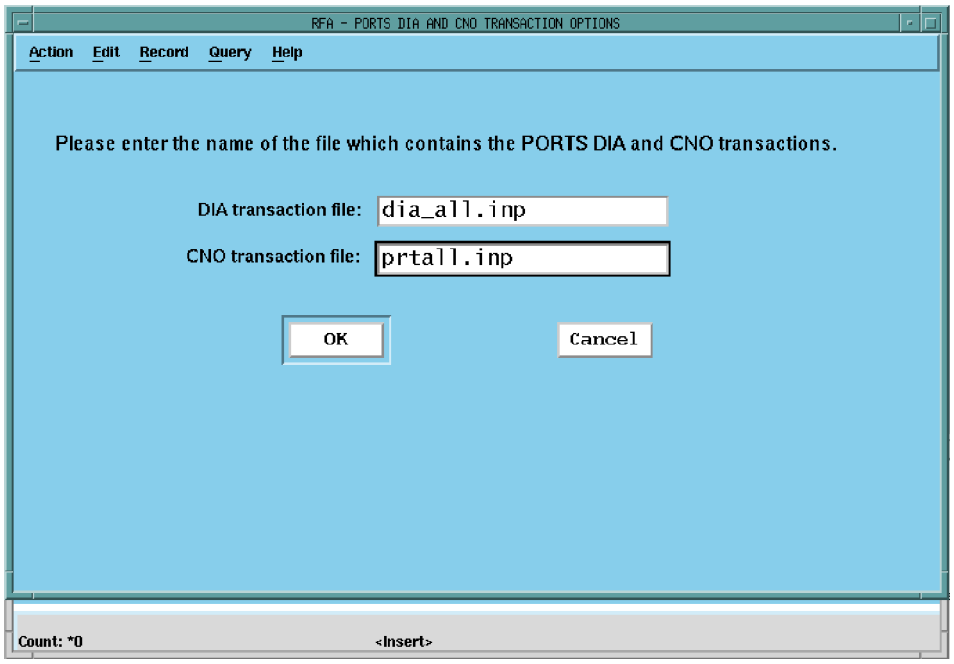

Figure 5.3.5.2.3-1. RFA - PORTS DIA and CNO Transaction Options Window

Push Buttons. This window provides access to the following buttons.

{OK} Loads both the CNO input transaction file and the DIA data file into the RFA ORACLE database. The CNO input record format must conform to the standards set by the JRS. If the load is successful, the RFA - JRS Load Results window appears (See Paragraph 5.3.5.2.4). If an error occurs loading the CNO data, then the RFA - PORTS Input Transaction window appears (See Paragraph 5.3.5.2.3.1). If an error occurs loading the DIA data, then the RFA - PORTS DIA Load Error window appears (See Paragraph 5.3.5.2.3.2). Otherwise, the RFA - PORTS DIA CNO Load Error window appears if an error occurs loading both DIA and CNO data (See Paragraph 5.3.5.2.3.3).

{Cancel} Exits the PORTS batch process, and returns the user to the RFA - Select File window (See Paragraph 5.3.5.2.1).

5.3.5.2.3.1 RFA - PORTS Input Transaction Load Error

The RFA - PORTS Input Transaction Load Error window, as shown in Figure 5.3.5.2.3.1-1, indicates an error occurred while loading the CNO input transaction file into the RFA ORACLE database. The user should verify the file is in the appropriate directory and contains at least a single record.

Figure 5.3.5.2.3.1-1. RFA - PORTS Input Transaction Load Error Window

Push Buttons. This window provides access to the following buttons.

{OK} Returns the user to the RFA - PORTS Transaction Options window (See Paragraph 5.3.5.2.2).

5.3.5.2.3.2 RFA - PORTS DIA Load Error

The RFA - PORTS DIA Load Error window, as shown in Figure 5.3.5.2.3.2-1, indicates an error occurred while loading the DIA input transaction file into the RFA ORACLE database. The user should verify the file is in the appropriate directory and contains at least a single record.

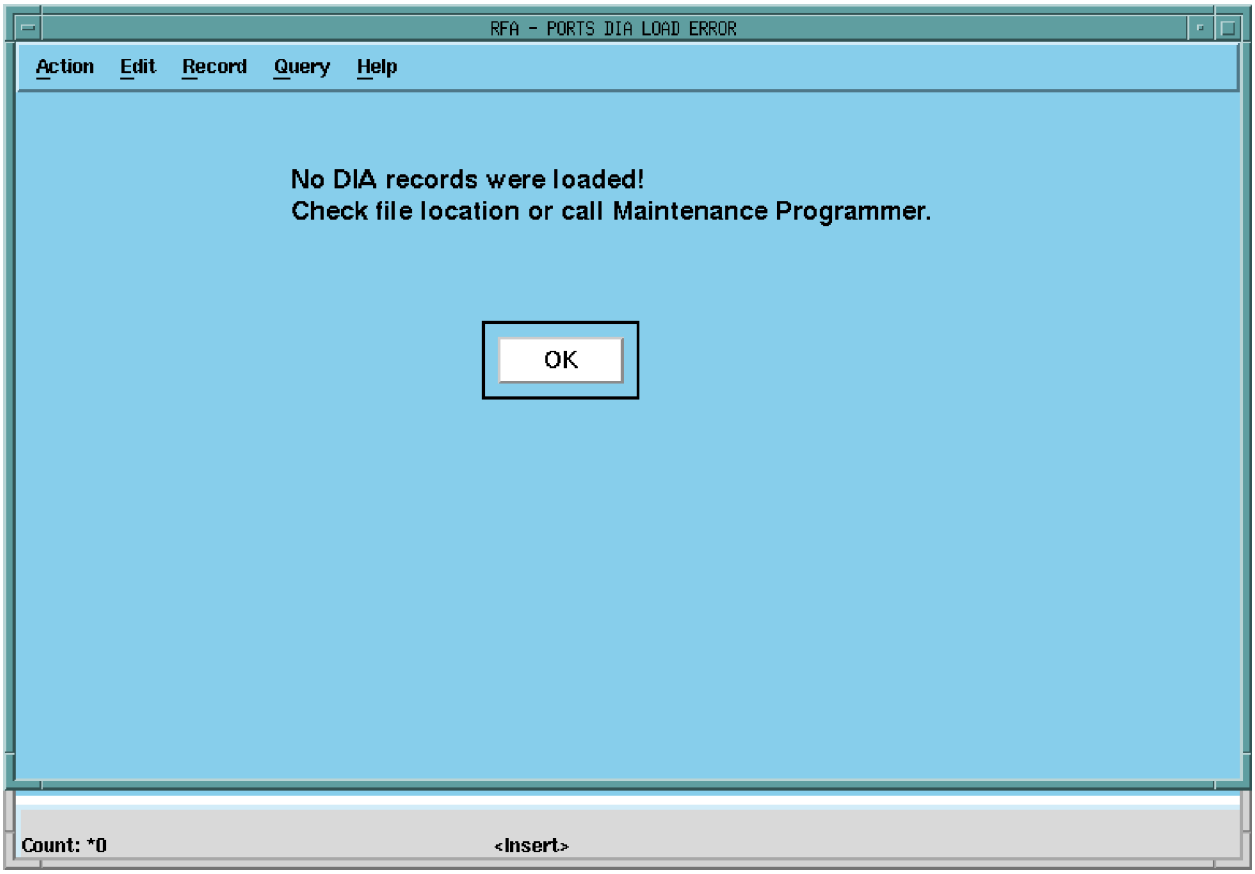

Figure 5.3.5.2.3.2-1. RFA - PORTS DIA Load Error Window

Push Buttons. This window provides access to the following button:

{OK} Returns the user to the RFA - PORTS Transaction Options window (See Paragraph 5.3.5.2.2).

5.3.5.2.3.3 RFA - PORTS DIA CNO Load Error

The RFA - PORTS DIA CNO Load Error window, as shown in Figure 5.3.5.2.3.3-1, indicates an error occurred while loading both the CNO input transaction file and the DIA data file into the RFA ORACLE database. The user should verify the files are in the appropriate directory and contain at least a single record.

Figure 5.3.5.2.3.3-1. RFA - PORTS DIA CNO Load Error Window

Push Buttons. This window provides access to the following button:

{OK} Returns the user to the RFA - PORTS Transaction Options window (See Paragraph 5.3.5.2.2).

5.3.5.2.4 RFA - JRS Load Results

The RFA - JRS Load Results window, shown in Figure 5.3.5.2.4-1, displays the number of CNO input transactions and DIA records, which are loaded into the RFA ORACLE database. These records are subsequently ready for additional JRS validation. A message display prompts the user if further batch processing is desired.

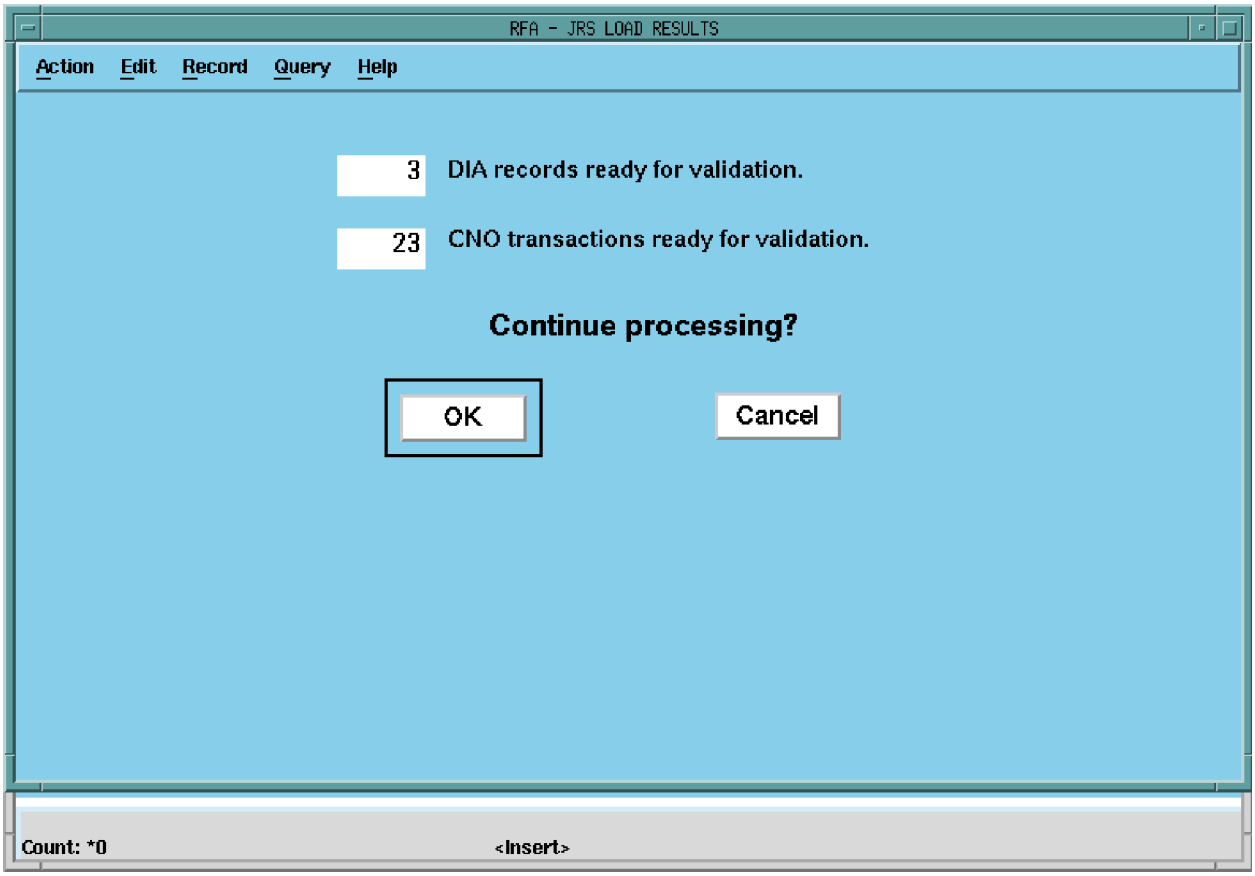

Figure 5.3.5.2.4-1. RFA - JRS Load Results Window

Push Buttons. This window provides access to the following buttons:

{OK} Continues PORTS batch processing. The RFA - JRS Transaction Listing Options window appears (See Paragraph 5.3.5.2.6).

{Cancel} Terminates batch processing without updating the PORTS tables in the RFA ORACLE database, and returns the user to the RFA - Ports Transaction Options window (See Paragraph 5.3.5.2.2).

5.3.5.2.5 RFA - JRS Transaction Listing Options

The RFA - JRS Transaction Listing Options window, shown in Figure 5.3.5.2.5-1, gives the user the opportunity to either view or print the PORTS CNO Input Transaction Listing Report or continue batch processing without a report.

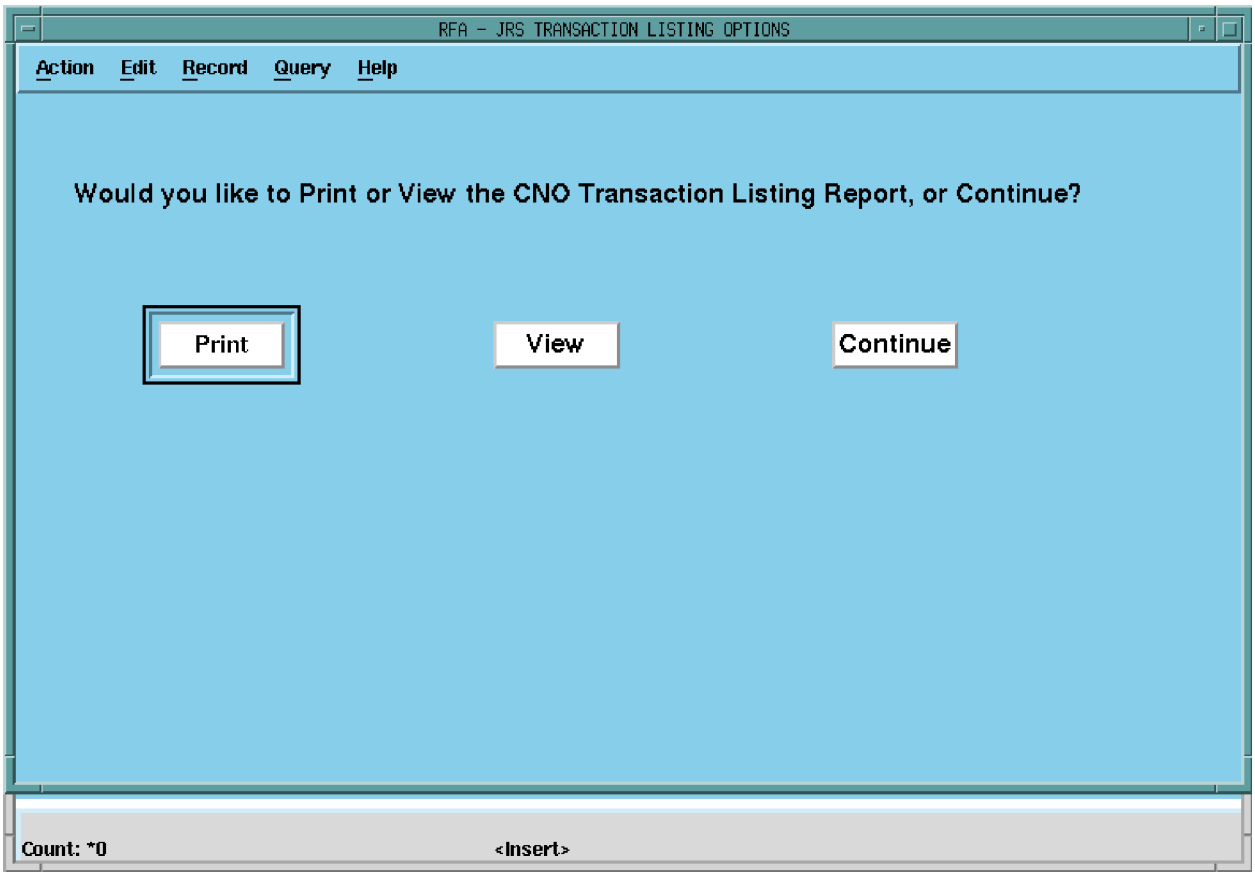

Figure 5.3.5.2.5-1. RFA - JRS Transaction Listing Options Window

Push Buttons. This window provides access to the following buttons:

{Print} Gives the user the opportunity to print the PORTS CNO Input Transaction Report in the background, and continue with batch processing immediately. Clicking **{Print}**, causes the RFA - Printer Selection window to appear (See RFA - Printer Selection below).

{View} Displays a wait window temporarily until the PORTS CNO Input Transaction Report is displayed. Once the report appears, the user may traverse the various pages of the report, but must ultimately close the report to continue batch processing. The RFA - JRS Edit Results window appears on closing the report (See Paragraph 5.3.5.2.6).

{Continue} Continues the PORTS batch processing without viewing the PORTS CNO Input Transaction Listing report as the RFA - JRS Edit Results window appears (See Paragraph 5.3.5.2.6).

RFA - Printer Selection. The user can select a printer to direct the PORTS CNO Input Transaction Listing Report to print; however, the user must know the name of a valid printer, which is configured to the system. The printer name must be entered in the printer selection box in the RFA - Printer Selection window shown in Figure 5.3.5.2.5-2.

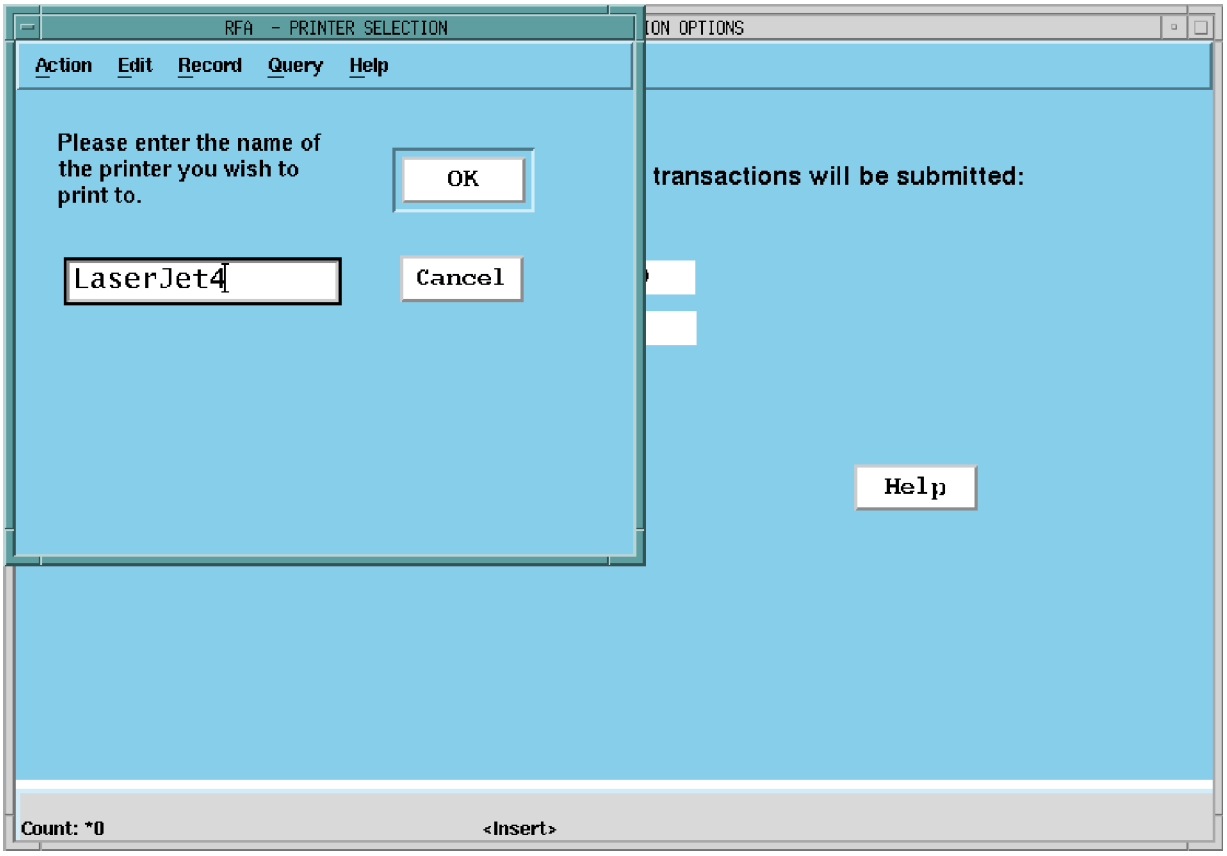

Figure 5.3.5.2.5-2. RFA - Printer Selection Window

Push Buttons. This window provides access to the following buttons:

{OK} Displays a wait window temporarily until the PORTS CNO Input Transaction Listing Report is directed to the printer. The RFA - JRS Edit Results window appears when the printer receives the report (See Paragraph 5.3.5.2.5).

{Cancel} Returns the user to the RFA - PORTS Transaction Options window (See Paragraph 5.3.5.2.5).

5.3.5.2.6 RFA - JRS Edit Results

The load statistics and the JRS format edit results are displayed in the RFA - JRS Edit Results window shown in Figure 5.3.5.2.6-1. The load statistics indicate the total number of transactions loaded, including the header and trailer records. The edit results indicate the number of warnings and errors detected. Additionally, the total number of transactions, which are forwarded for further processing, and the total number of rejected transactions are displayed. These figures relate only to the JRS-formatted CNO data.

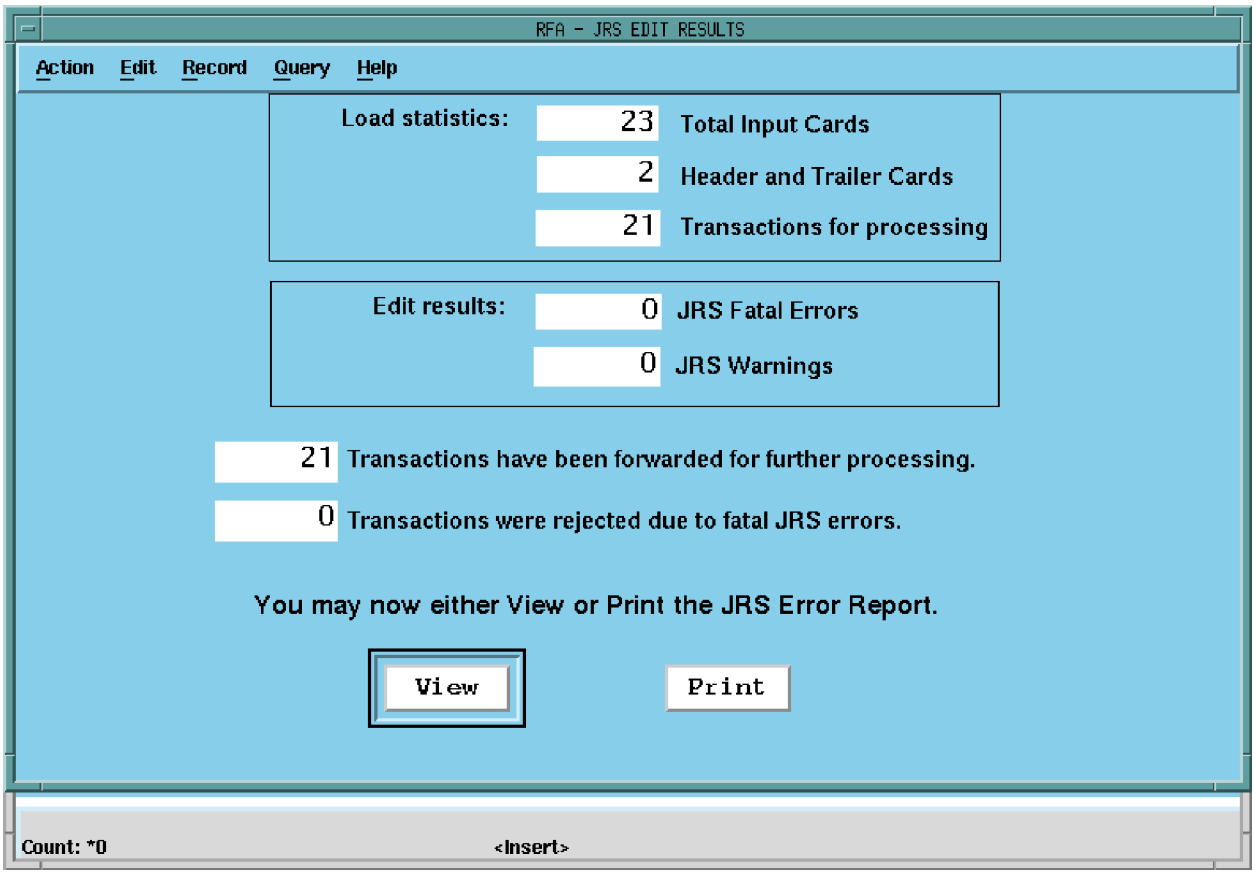

Figure 5.3.5.2.6-1. RFA - JRS Edit Results Window

Push Buttons. This window provides access to the following buttons:

{View} Displays a wait window temporarily until the JRS Edit Report is displayed. Once the report appears, the user may traverse the various pages of the report, but must ultimately close the report to continue batch processing. The RFA - PORTS Data Edits window appears on closing the report (See Paragraph 5.3.5.2.7).

{Print} Gives the user the opportunity to print the JRS Edit Report in the background and continue with batch processing immediately. Clicking **{Print}**, causes the RFA - Printer Selection window to appear (See Paragraph 5.3.5.2.6.1).

5.3.5.2.6.1 RFA - Printer Selection

The user can select a printer to direct the JRS Edit Report to print; however, the user must know the name of a valid printer, which is configured to the system. The printer name must be entered in the printer selection box in the RFA - Printer Selection window shown in Figure 5.3.5.2.6.1-1.

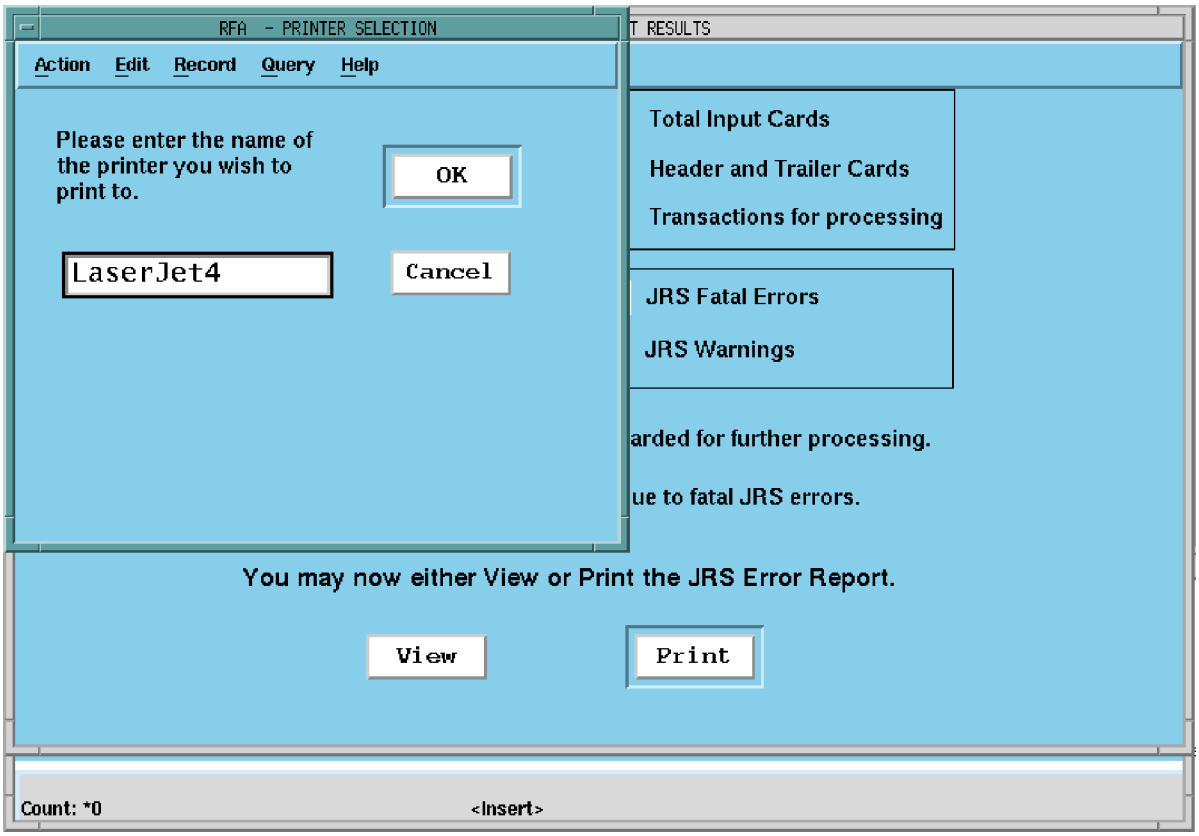

Figure 5.3.5.2.6.1-1. RFA - Printer Selection Window

Push Buttons. This window provides access to the following buttons:

{OK} Displays a wait window temporarily until the JRS Edit Report is directed to the printer. The RFA - PORTS Data Edits window appears when the printer receives the report (See Paragraph 5.3.5.2.7).

{Cancel} Returns the user to the RFA - JRS Edit Results window (See Paragraph 5.3.5.2.6).

5.3.5.2.7 RFA - PORTS Data Edits

The RFA - PORTS Data Edits window, shown in Figure 5.3.5.2.7-1, provides the user the option to continue with batch processing by performing the JRS data edits or to terminate batch processing and return to the RFA - PORTS Transaction Options window (See Paragraph 5.3.5.2.2).

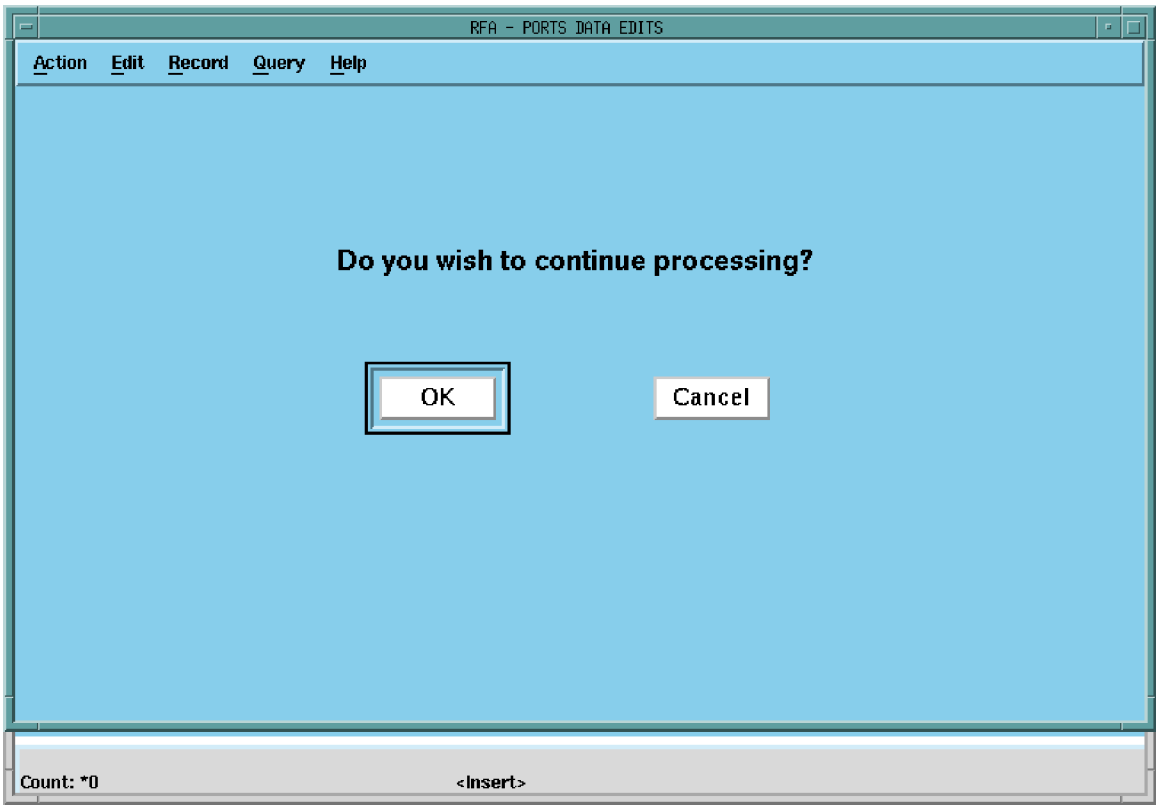

Figure 5.3.5.2.7-1. RFA - PORTS Data Edits Window

Push Buttons. This window provides access to the following buttons.

{OK} Performs the JRS data edits made on the CNO input transactions, and updates the CNO tables in the RFA ORACLE database accordingly. Data edits are performed on the DIA input data and the PORTS tables in the RFA ORACLE database are updated accordingly. The CNO data are merged with the DIA data in the PORTS tables in the RFA ORACLE database. The PORTS database is rebuilt from scratch by deleting all PORTS records before updating the PORTS tables in the database. The RFA - PORTS CNO Data Edit Results window appears on completion of edit processing (See Paragraph 5.3.5.2.8).

{Cancel} Terminates batch processing without updating the PORTS tables in the RFA ORACLE database, and returns the user to the RFA - PORTS Transaction Options window (See Paragraph 5.3.5.2.2).

5.3.5.2.8 RFA - PORTS CNO Data Edit Results

The RFA - PORTS CNO Data Edit Results window, shown in Figure 5.3.5.2.8-1, indicates the number of transactions that successfully update the PORTS tables in the RFA ORACLE database, and the number of transactions that are rejected due to JRS data edit errors. The user is given the opportunity to view or print the PORTS CNO Input Transaction Error Report, which details the JRS data edit warnings and errors detected.

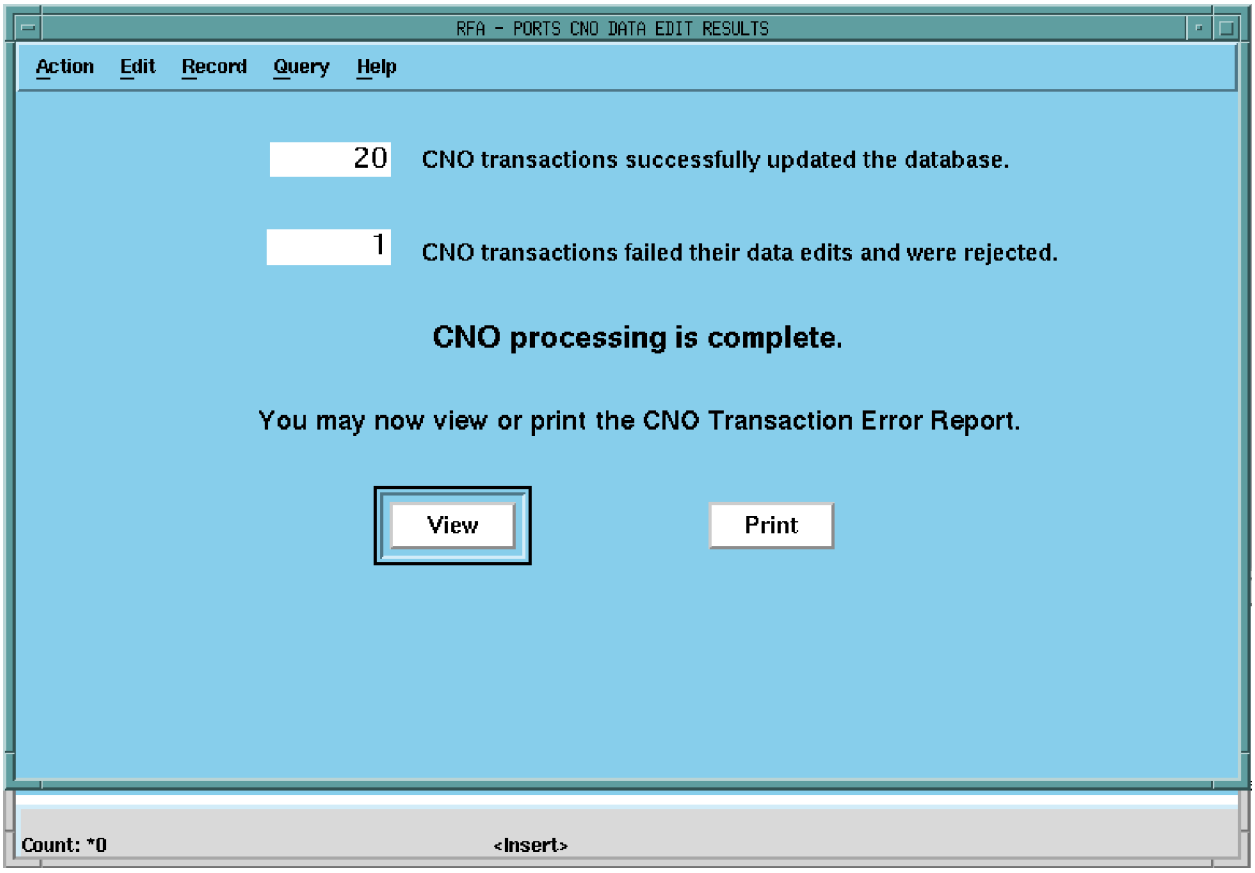

Figure 5.3.5.2.8-1. RFA - PORTS CNO Data Edit Results Window

Push Buttons. This window provides access to the following buttons:

{View} Displays a wait window temporarily until the PORTS CNO Input Transaction Error Report is displayed. Once the report appears, the user may traverse the various pages of the report, but must ultimately close the report to complete batch processing. The RFA - PORTS DIA Data Edit Results window appears on closing the report (See Paragraph 5.3.5.2.9).

{Print} Gives the user the opportunity to print the PORTS CNO Input Transaction Report in the background, and continue with batch processing immediately. Clicking **{Print}**, causes the RFA - Printer Selection window to appear (See Paragraph 5.3.5.2.8.1).

5.3.5.2.8.1 RFA - Printer Selection

The user can select a printer to direct the PORTS CNO Input Transaction Error Report to print; however, the user must know the name of a valid printer, which is configured to the system. The printer name must be entered in the printer selection box in the RFA - Printer Selection window shown in Figure 5.3.3.2.8.1-1.

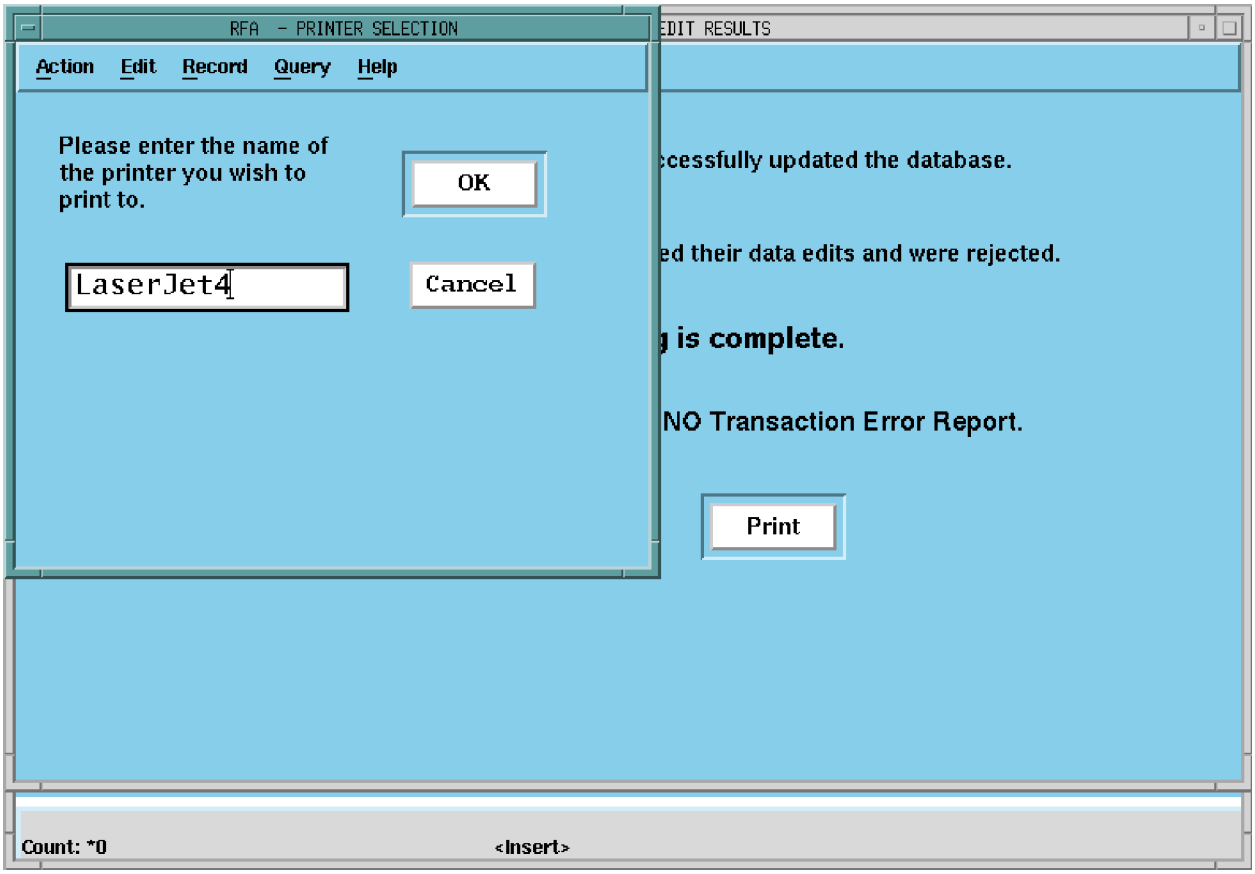

Figure 5.3.5.2.8.1-1. RFA - Printer Selection Window

Push Buttons. This window provides access to the following buttons:

{OK} Displays a wait window temporarily until the PORTS CNO Input Transaction Error Report is directed to the printer. The RFA - PORTS DIA Data Edit Results window appears when the printer receives the report (See Paragraph 5.3.5.2.9).

{Cancel} Returns the user to the RFA - PORTS CNO Data Edit Results window (See Paragraph 5.3.5.2.8).

5.3.5.2.9 RFA - PORTS DIA Data Edit Results

The RFA - PORTS DIA Data Edit Results window, shown in Figure 5.3.5.2.9-1, indicate the number of transactions that successfully update the PORTS tables in the RFA ORACLE database, and the number of transactions that are rejected due to data edit errors. The user is given the opportunity to view or print the PORTS DIA Input Transaction Error Report, which details the data edit warnings and errors detected.

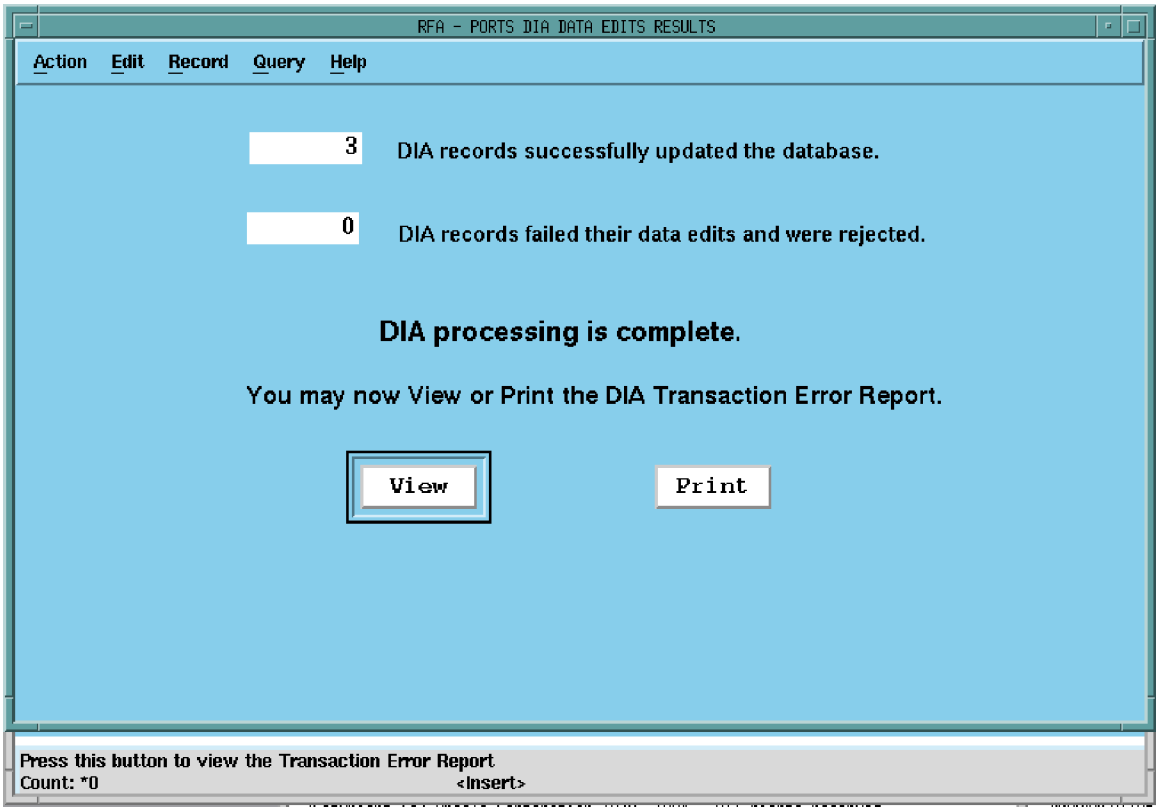

Figure 5.3.5.2.9-1. RFA PORTS DIA Data Edit Results Window

Push Buttons. This window provides access to the following buttons:

{View} Displays a wait window temporarily until the PORTS DIA Input Transaction Error Report is displayed. Once the report appears, the user may traverse the various pages of the report, but must ultimately close the report to complete batch processing. The RFA - Select File window appears on closing the report (See Paragraph 5.3.5.2.1).

{Print} Gives the user the opportunity to print the PORTS CNO Input Transaction Report in the background, and continue with batch processing immediately. Clicking **{Print}**, causes the RFA - Printer Selection window to appear (See Paragraph 5.3.5.2.9.1).

5.3.5.2.9.1 RFA - Printer Selection

The user can select a printer to direct the PORTS DIA Input Transaction Error Report to print; however, the user must know the name of a valid printer, which is configured to the system. The printer name must be entered in the printer selection box in the RFA - Printer Selection window shown in Figure 5.3.5.2.9.1-1.

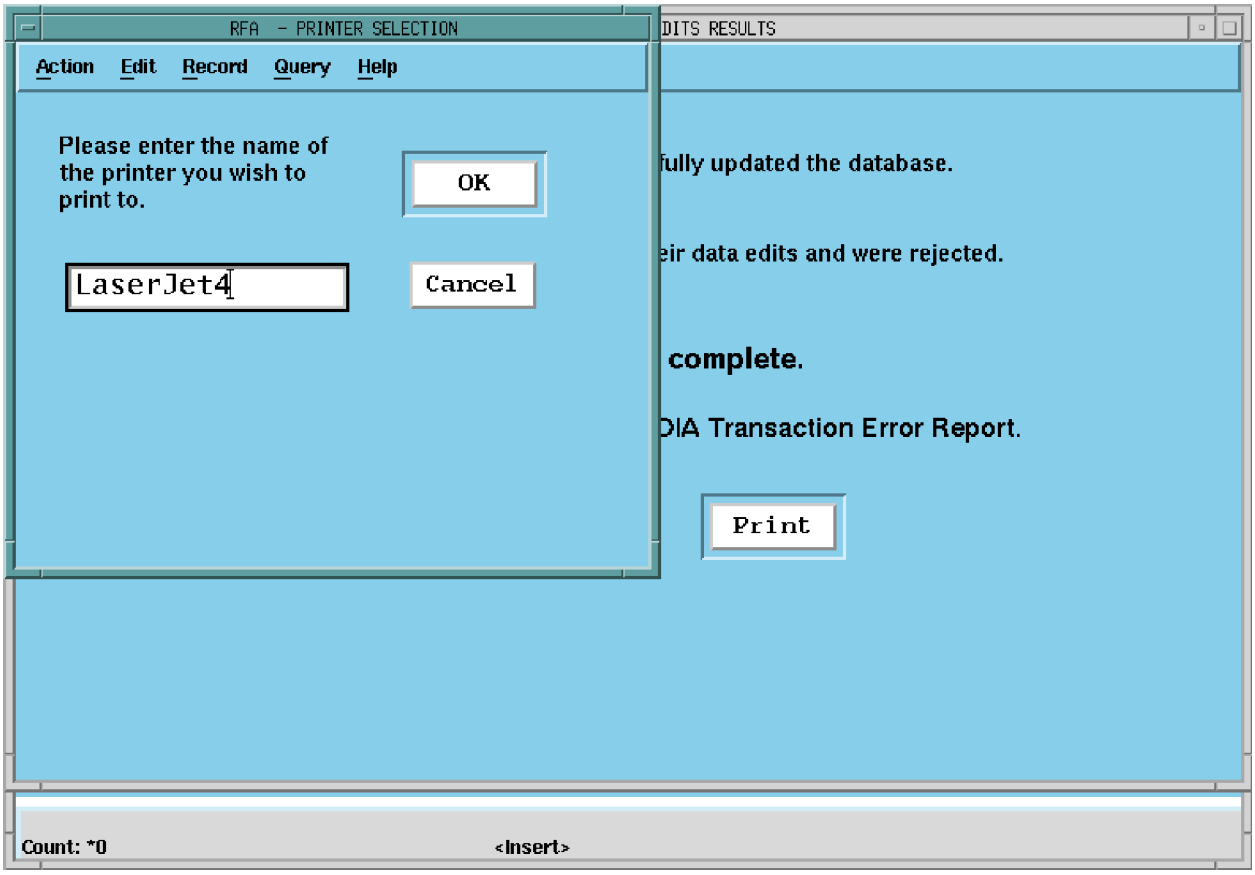

Figure 5.3.5.2.9.1-1. RFA - Printer Selection Window

Push Buttons. This window provides access to the following buttons:

{OK} Displays a wait window temporarily until the PORTS DIA Input Transaction Error Report is directed to the printer. The RFA - Select File window appears when the printer receives the report (See Paragraph 5.3.5.2.1).

{Cancel} Returns the user to the RFA - PORTS DIA Data Edit Results window (See Paragraph 5.3.5.2.9).

5.3.5.2.10 RFA - PORTS DIA Transaction Options

The user must enter the DIA input data file name in the transaction file input box of the RFA - PORTS DIA Transaction Options window shown in Figure 5.3.5.2.10-1. This flat, ASCII-encoded file is submitted by the DIA. The file must be stored in the *rfa_net* directory under the user's home directory.

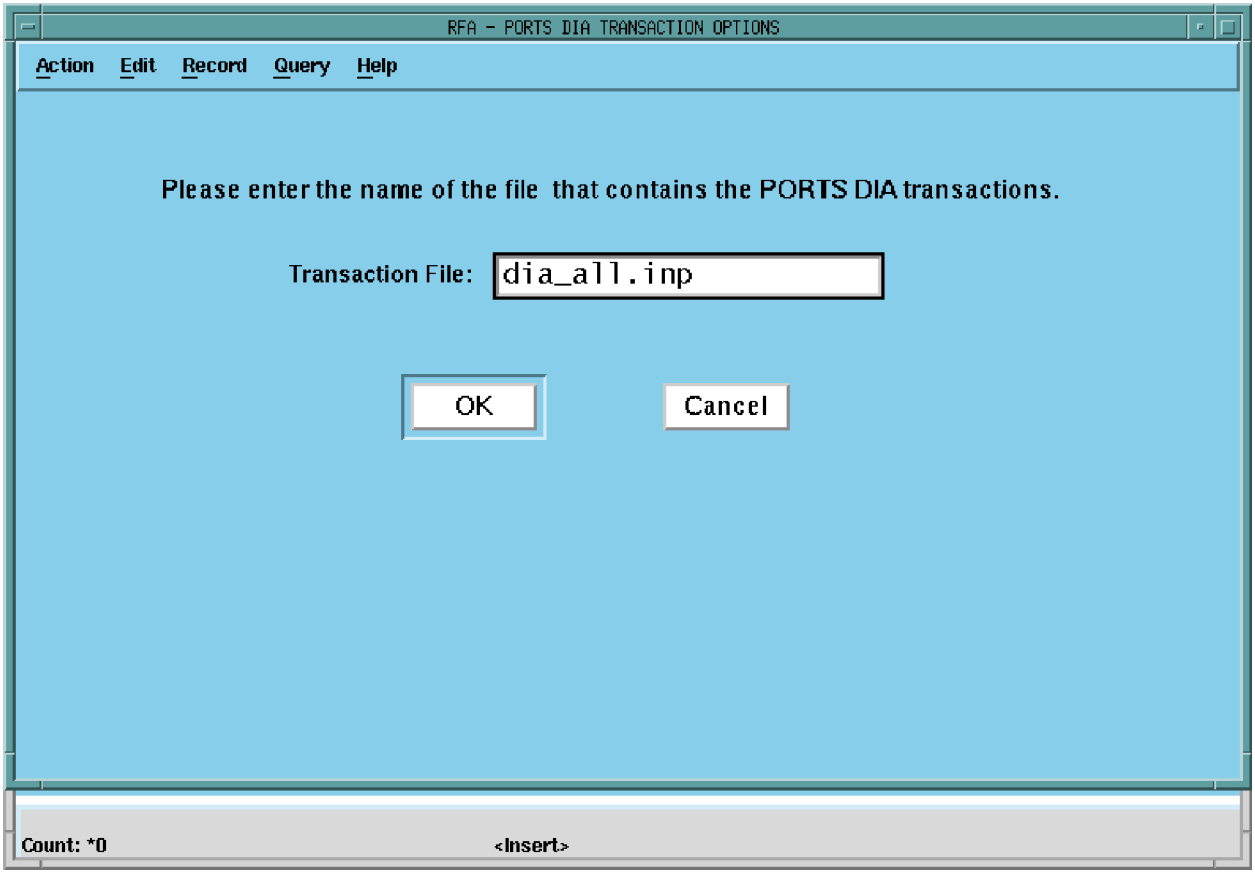

Figure 5.3.5.2.10-1. RFA - PORTS DIA Transaction Options Window

Push Buttons. This window provides access to the following buttons:

{OK} Loads the DIA data file into the RFA ORACLE database. If the load is successful, the RFA - JRS Load Results window appears (See Paragraph 5.3.5.2.4). Otherwise, the RFA - PORTS DIA Load Error window appears if an error occurs loading the DIA data (See RFA - PORTS Input Transaction Load Error below).

{Cancel} Exits the PORTS batch process, and returns the user to the RFA - Select File window (See Paragraph 5.3.5.2.1).

RFA - PORTS Input Transaction Load Error. The RFA - PORTS DIA Load Error window, shown in Figure 5.3.5.2.10-2, indicates an error occurred while loading the DIA data file into the RFA ORACLE database. The user should verify the file is in the appropriate directory, and the file contains at least a single record.

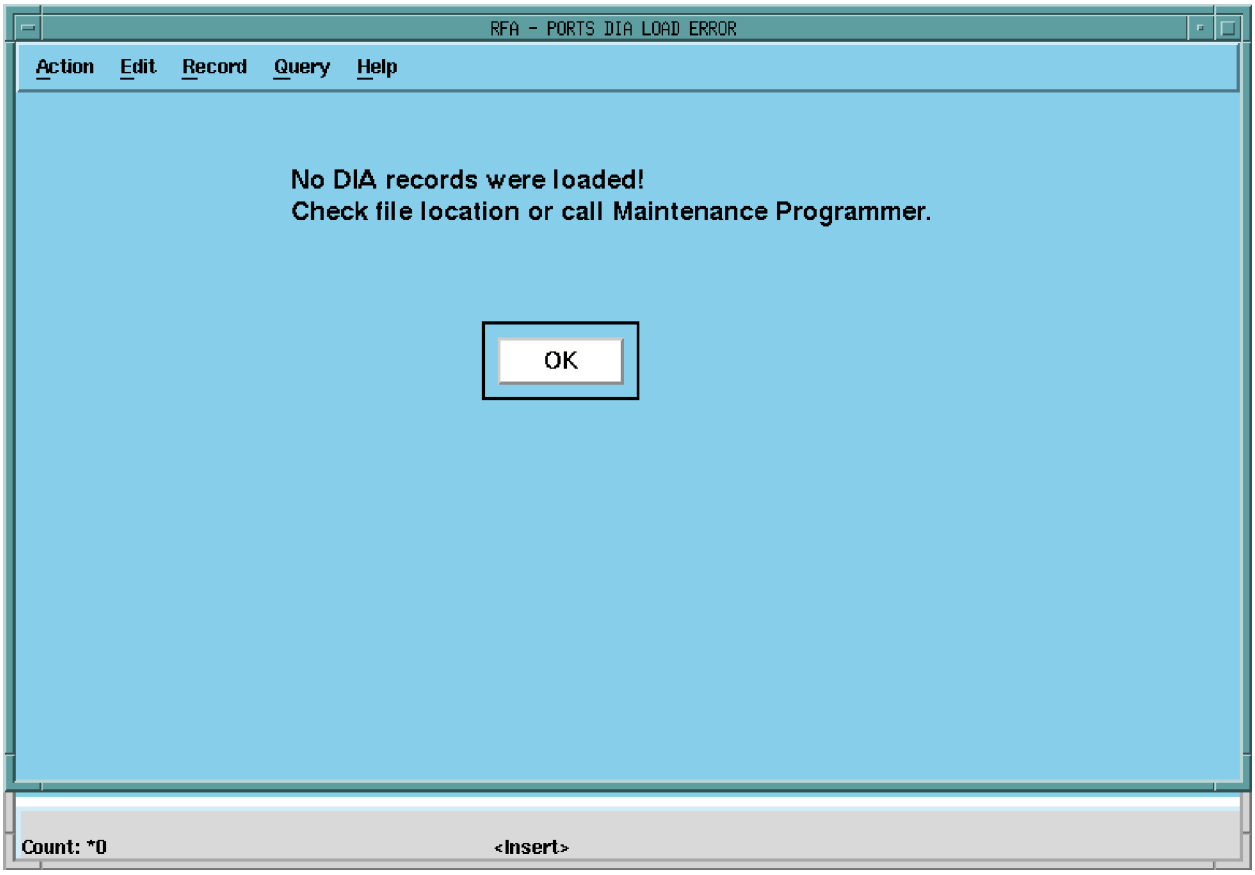

Figure 5.3.5.2.10-2. RFA - PORTS DIA Load Error Window

Push Buttons. This window provides access to the following button:

{OK} Returns the user to the RFA - PORTS Transaction Options window (See Paragraph 5.3.5.2.2).

5.3.5.2.11 RFA - JRS Load Results

The RFA - JRS Load Results window, shown in Figure 5.3.5.2.11-1, displays the number of DIA records, which are loaded into the RFA ORACLE database. These records are subsequently ready for additional validation. A message display prompts the user if further batch processing is desired.

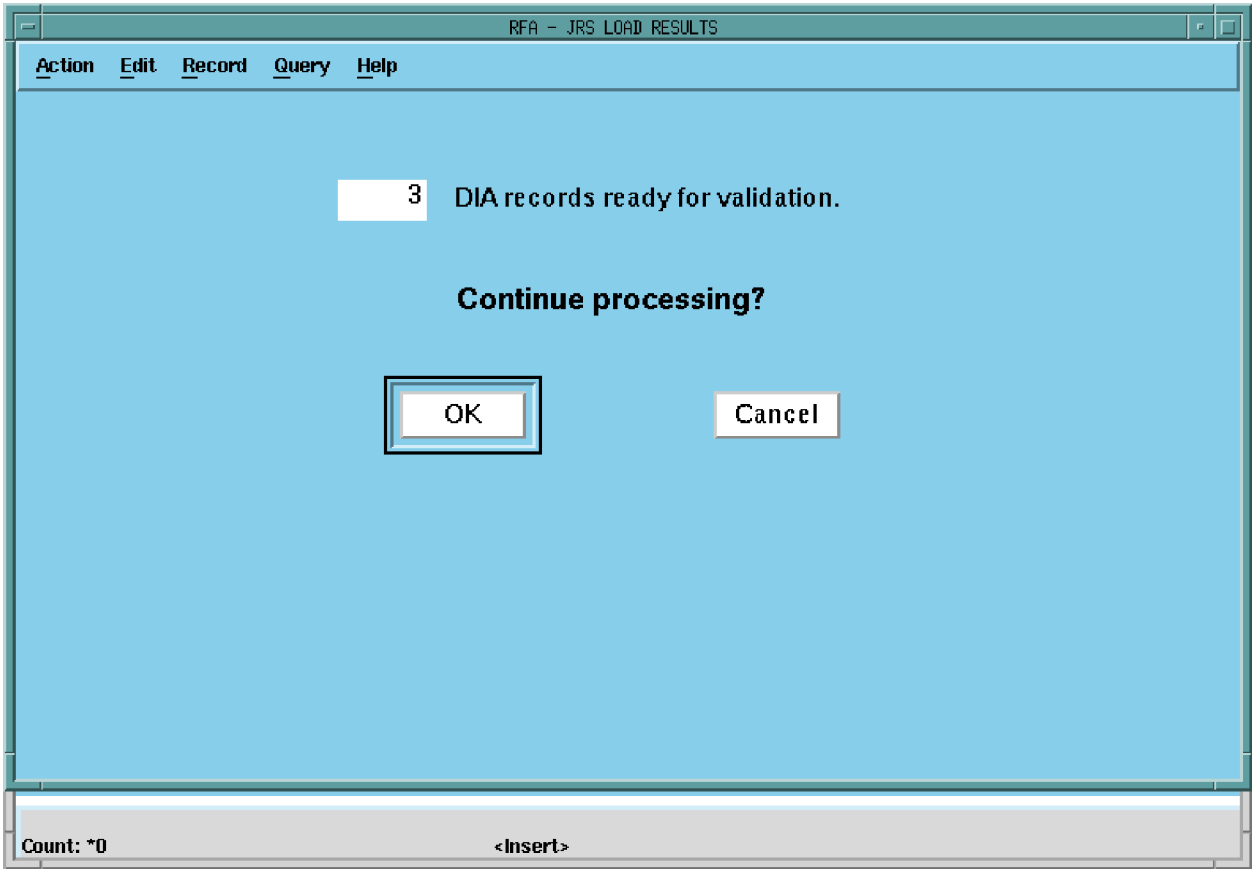

Figure 5.3.5.2.11-1. RFA - JRS Load Results Window

Push Buttons. This window provides access to the following buttons:

{OK} Continues PORTS batch processing. A wait window temporarily appears until the RFA - PORTS DIA Data Edit Results window appears (See Paragraph 5.3.5.2.12).

{Cancel} Terminates batch processing without updating the PORTS tables in the RFA ORACLE database, and returns the user to the RFA - Select File window (See Paragraph 5.3.5.2.1).

5.3.5.2.12 RFA - PORTS DIA Data Edit Results

The RFA - PORTS DIA Data Edit Results window, shown in Figure 5.3.5.2.12-1, indicates the number of transactions that successfully update the PORTS tables in the RFA ORACLE database, and the number of transactions that are rejected due to data edit errors. The user is given the opportunity to view or print the PORTS DIA Input Transaction Error Report, which details the data edit warnings and errors detected.

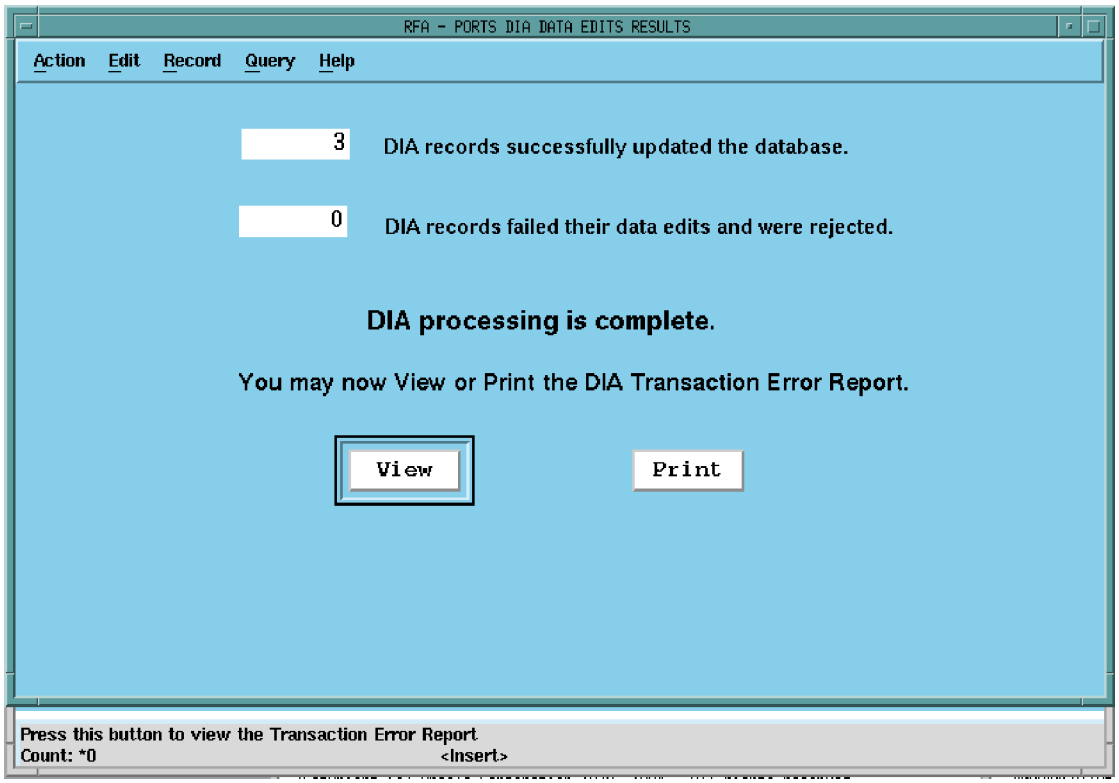

Figure 5.3.5.2.12-1. RFA - PORTS DIA Data Edit Results Window

Push Buttons. This window provides access to the following buttons:

{View} Displays a wait window temporarily until the PORTS DIA Input Transaction Error Report is displayed. Once the report appears, the user may traverse the various pages of the report, but must ultimately close the report to complete batch processing. The RFA - Select File window appears on closing the report (See Paragraph 5.3.5.2.1).

{Print} Gives the user the opportunity to print the PORTS CNO Input Transaction Report in the background, and continue with batch processing immediately. Clicking **{Print}**, causes the RFA - Printer Selection window to appear (See RFA - Printer Selection below).

RFA - Printer Selection. The user can select a printer to direct the PORTS DIA Input Transaction Error

Report to print; however, the user must know the name of a valid printer, which is configured to the system. The printer name must be entered in the printer selection box in the RFA - Printer Selection window as shown in Figure 5.3.5.2.12-2.

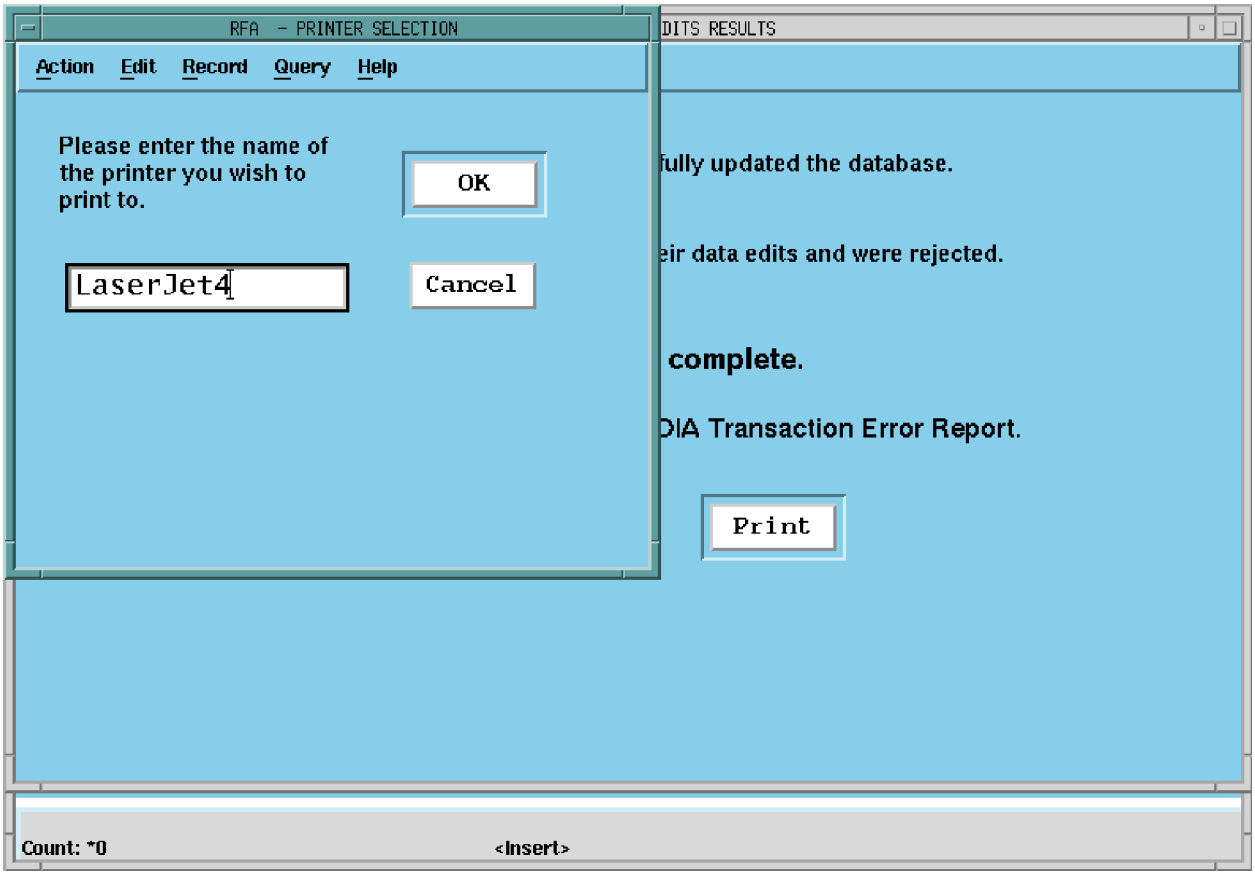

Figure 5.3.5.2.12-2. RFA - Printer Selection Window

Push Buttons. This window provides access to the following buttons:

{OK} Displays a wait window temporarily until the PORTS DIA Input Transaction Error Report is directed to the printer. The RFA - Select File window appears when the printer receives the report (See Paragraph 5.3.5.2.1).

{Cancel} Returns the user to the RFA - PORTS DIA Data Edit Results window (See Paragraph 5.3.5.2.12).

5.3.5.3 PORTS Network Function

The PORTS Network function is executed following batch update. The Network function processes all updates (adds, changes, and deletes) to the given reference file. (The function generates and executes a SQL script to update the specified reference file on the JOPES Core database servers.) For this reference file, only the SQL script is generated; transactions in JRS format are not generated.

The Network function consists of three phases:

1. Transaction Reduction,
2. Before/After Reports, and
3. Transaction File Generation.

Each phase executes in sequence for the entire set of updates. At certain points the user may cancel the function and return to the RFA Main Menu, if desired. See individual descriptions that follow for more detail.

5.3.5.3.1 Transaction Reduction

After selecting Network function, transaction reduction begins. The transaction reduction phase takes the add, change, and delete transactions and reduces them to one update per database record. Figure 5.3.5.3.1-1 shows the RFA - Reducing PORTS Update Transactions window that appears.

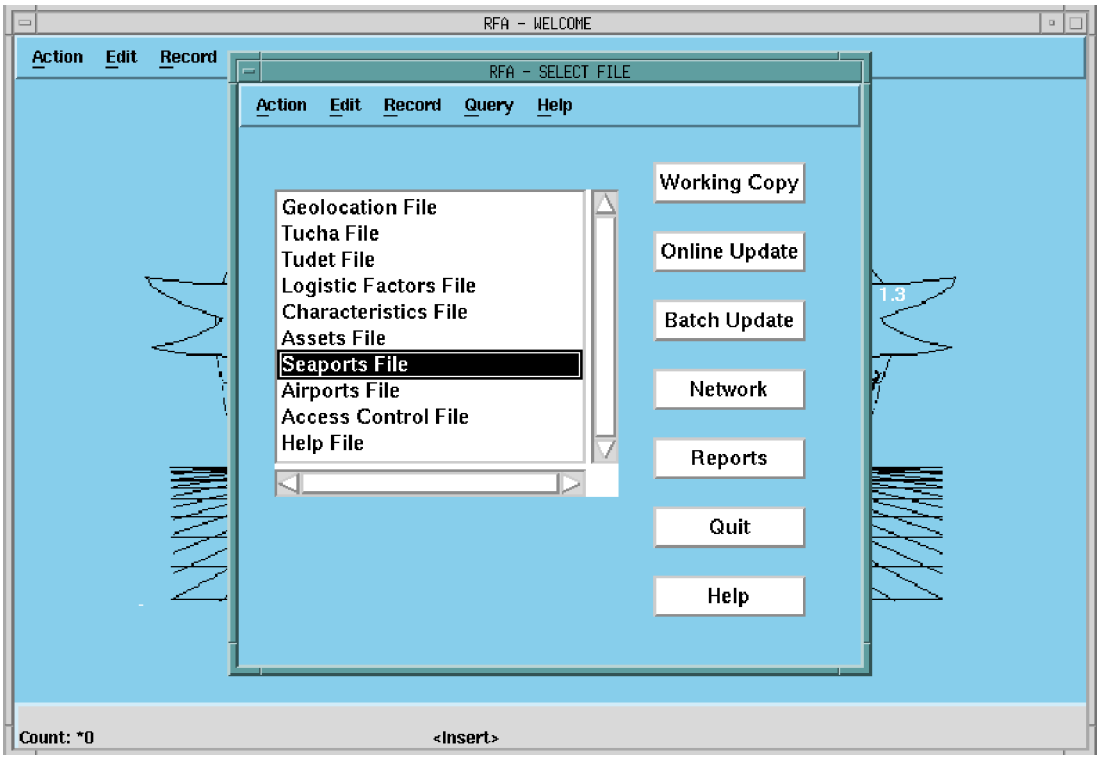

Figure 5.3.5.3.1-1. RFA - Reducing PORTS Update Transactions Window

All updates for a particular database record are gathered together and the first and last update examined. The

reduction is then performed according to the following algorithm:

First Update	Last Update	Reduced Transaction
Add	Add	Add
Add	Change	Add
Add	Delete	No action
Change	Add	Change
Change	Change	Change
Change	Delete	Delete
Delete	Add	Change
Delete	Change	Change
Delete	Delete	Delete

For change transactions, the first and last update are compared field-by-field. If no field was changed other than the creation date of the record or the change date of the record, then no reduced transaction is required; no reduced transaction is generated for that change.

The procedure is repeated for each subsequent database record and each database table in the reference file, until all updates are processed. Processing proceeds immediately to Before/After Report generation.

5.3.5.3.2 Before/After Reports

After the transaction reduction is completed, the update cycle reports are generated. Figure 5.3.5.3.2-1 shows the RFA - PORTS Preparing Reports window that appears.

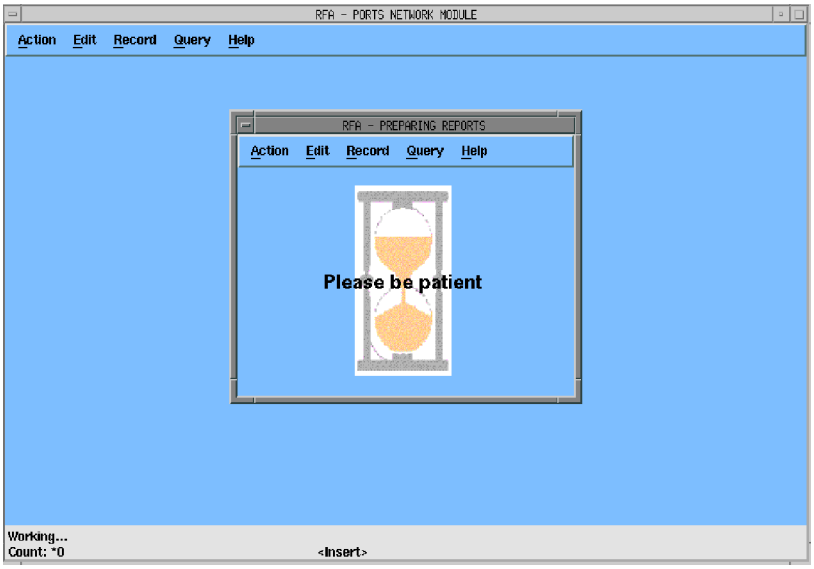

Figure 5.3.5.3.2-1. RFA - PORTS Preparing Reports Window

The Before/After Reports show the results of reduction in update transactions. For each database table in the reference file a report is generated showing the before and/or after image of each reduced update transaction.

Summary information is listed first, followed by detailed transaction listings. An after image is shown for adds, before image for deletes, and both before and after images for changes. Fields modified in the change transaction are highlighted. Generated reports are sent to the printer. Appendix B provides examples of sample reports.

The reports provided are described as follows:

1. **Harbor Cycle Update Report**. Extracts all adds, changes, and deletes after reduction to the Harbor Information table. Details include geographic location code, harbor ID, wharf ID, dimensions (depth, diameter, and height), harbor type and code, and remarks.

2. **Seaport Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Information table. Details include geographic location code, port ID, harbor ID, wharf ID, Defense Mapping Agency (DMA) chart number, category code, world port index number, priority, location of nearest airfield, distance to nearest airfield, capacity adequacy, holding area quality, tugboat maximum horsepower, POL lighter carrying capacity, largest vessel (by deadweight capacity) that can be repaired, wharf cargo storage holding area, container stuffing/unstuffing area, width between rail tracks, cargo capacity (daily source, STONs, and MTONs), month ice breaks, month ice forms, tidal rise, container storage capacity, potable water storage capacity volume, remarks, capacity data review date, and seaport data review (by analyst) date.

3. **Seaport Anchorage Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Anchorage Information table. Details include geographic location code, harbor ID, wharf ID, anchorage class, berth quantity, and remarks.

4. **Seaport Berth Depth Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Berth Depth Information table. Details include geographic location code, harbor ID, wharf ID, berth type (by depth), and berth length.

5. **Seaport Cargo Capacity Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Cargo Capacity Information table. Details include geographic location code, harbor ID, wharf ID, discharge capacity (MTONs, STONs, square feet, and source), storage capacity (MTONs, STONs, and source), open storage capacity (square feet, source), maximum length, and minimum depth.

6. **Seaport Channel Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Channel Information table. Details include geographic location code, harbor ID, wharf ID, channel number and name, dimensions (length, width, depth, and overhead clearance), and remarks.

7. **Seaport Clearance Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Cargo Clearance Information table. Details include geographic location code, harbor ID, wharf ID, transport mode, cargo clearance rate (STONs), quantity available, and remarks.

8. **Seaport Craft Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Craft Information table. Details include geographic location code, harbor ID, wharf ID, craft type, and craft quantity.

9. **Seaport Crane Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Crane Information table. Details include geographic location code, harbor ID, wharf ID, crane type, crane weight, and crane quantity.

10. **Seaport Floating Crane Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Floating Crane Information table. Details include geographic location code, harbor ID, wharf ID, crane ID, quantity, and lift capacity.

11. **Seaport Material Handling Equipment (MHE) Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport MHE Information table. Details include geographic location code, harbor ID, wharf ID, material handling equipment code. weight, and quantity.

12. **Seaport Remark Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Remark Information table. Details include geographic location code, harbor ID, wharf ID, line number, and remark text.

13. **Seaport Standard Berth Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Standard Berth Information table. Details include geographic location code, harbor ID, wharf ID, berth class, sequence ID, and quantity.

14. **Seaport Structure Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Structure Information table. Details include level ID, description, channel count, number of ramps, electricity code, water code, cargo code, berthing space length, storage are (open, breakbulk, refrigerated, and ammunition), storage capacity (refined and crude oil, crude oil alone, and POL products), and discharge rate.

15. **Wharf Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Wharf Information table. Details include geographic location code, harbor ID, wharf ID, wharf code, and pipelines (capacity in barrels/day, and quantity).

16. **Wharf Berth Cycle Update Report.** Extracts all adds, changes, and deletes, after reduction, to the Wharf Berth Information table. Details include geographic location code, harbor ID, wharf ID, berth ID, cargo code, dimensions (length, width, and depth), and alternate uses (1st, 2nd, and 3rd).

17. **Wharf Container Storage Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Wharf Container Storage Information table. Details include geographic location code, harbor ID, wharf ID, and container storage (storage area, holding area, stacking count, and percent used).

18. **Wharf Equipment Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Wharf Equipment Information table. Details include geographic location code, harbor ID, wharf ID, equipment type, quantity, capability, and description.

After all reports are generated, processing proceeds immediately to transaction file generation.

5.3.5.3.3 Transaction File Generation

The final phase of the Network function is the generation and execution of the SQL script to update the database. The Network function executes a separate application enabling the user to determine the successful execution of the SQL script by viewing the contents of the PORTS Network Log File. The user may close the application or relocate the window, but should examine the contents of the log file prior to making a selection in the PORTS Networked Transaction Counts window. Figure 5.3.5.3.3-1 shows the RFA - PORTS Networked Transaction Counts and PORTS Network Log File windows that appear.

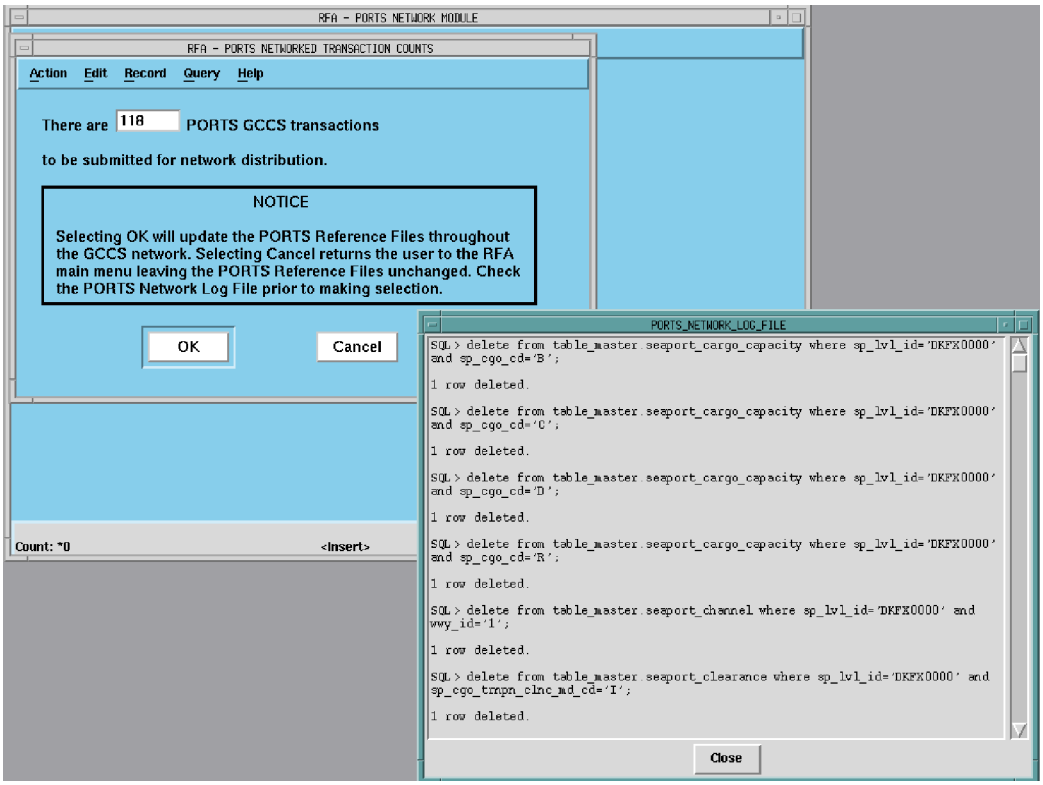

Figure 5.3.5.3.3-1. RFA - PORTS Networked Transaction Counts and PORTS Network Log File Windows

Push Buttons. The RFA - PORTS Networked Transaction Counts window provides the following buttons:

{OK} Updates the PORTS reference file on the JOPES Core database servers.

{Cancel} Cancels the function, and returns the user to the RFA main menu making no changes to the PORTS reference file on the JOPES Core database servers.

Push Buttons. The PORTS Network Log File window provides the following button:

{Close} Exits PORTS Network Log File window viewing function and does not effect the RFA software application.

The RFA - PORTS Networked Transaction Counts window displays the name and location of the transaction file that is generated and the results of the transaction reduction. For the result, the total number of reduced update transactions for the reference file is displayed. The fields relating to JRS transactions (WWMCCS/TS3 transactions) are display-only as it was decided not to provide this functionality for the Seaports file.

Following confirmation, the SQL script is generated as an ASCII file and written to the directory identified by environment variable $RFA_NET. Once file generation and execution is complete, the Network function terminates, and returns the user to the RFA Main Menu.

5.3.5.4 PORTS Reports

RFA provides an online and hardcopy reporting capability to generate several report types for the PORTS reference file. To execute the PORTS reports, highlight the **{Seaports File}** option from the left side of the RFA main menu, and click **{Reports}** on the right side, as shown in Figure 5.3.5.4-1. The RFA PORTS Reports Menu window appears, as shown in Figure 5.3.5.4-2.

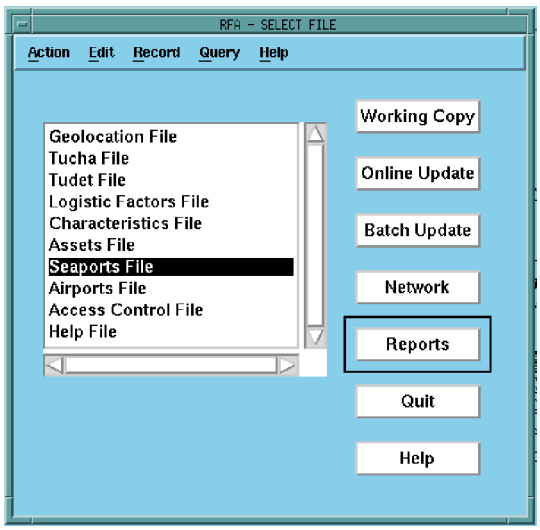

Figure 5.3.5.4-1. RFA - PORTS Reports Window

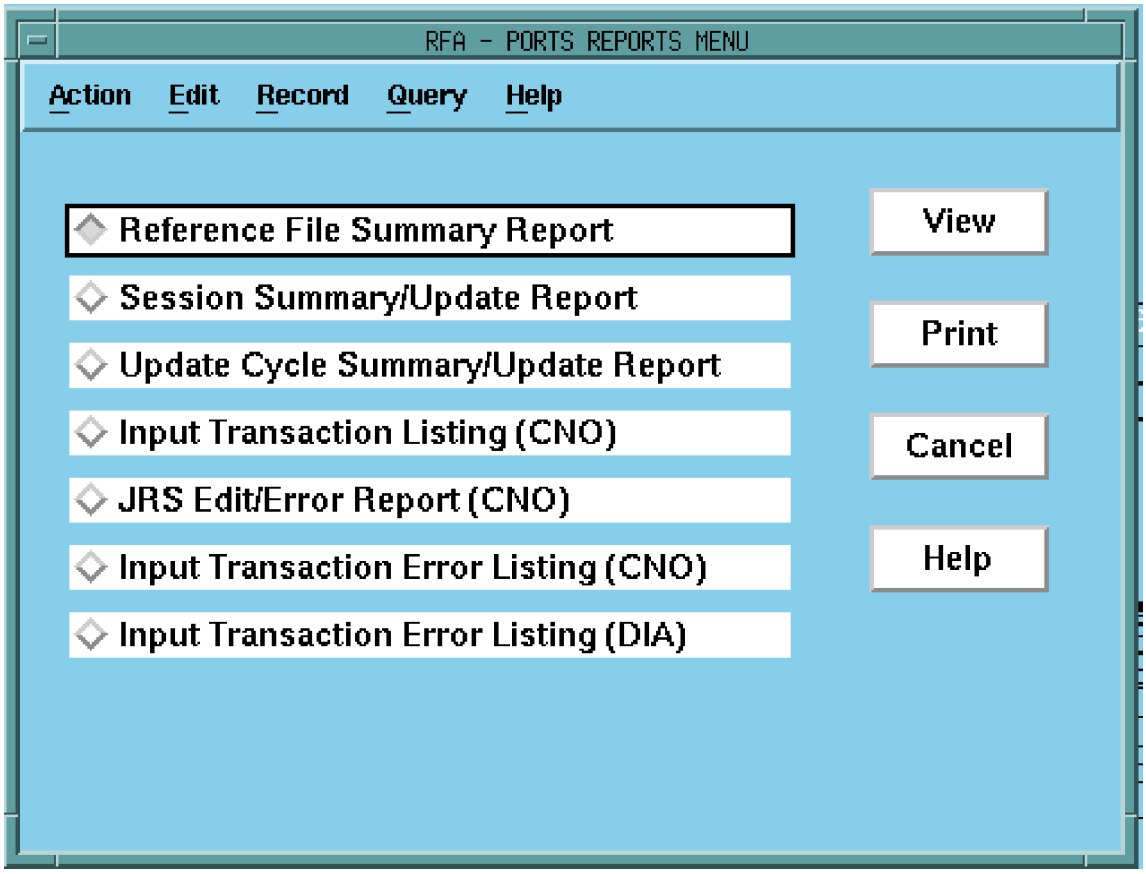

Figure 5.3.5.4-2. RFA - PORTS Reports Menu Window

Push Buttons. This window provides the following buttons:

{View}	Provides the report on the window.
{Print}	Provides the report on a printer. A pop-up window asks the user for the name of a particular printer.
{Cancel}	Cancels the process, and returns the user to the RFA main menu.
{Help}	Provides Online Help for this window.

Each report begins with a summary page, which may contain some or all of the following information: USERID, totals for items reported, total pages, sort sequence, start time, end time, and column heading definitions (See Appendix B for sample reports). The following paragraphs provide an overview of each type of report.

5.3.5.4.1 Reference File Summary Report

This report provides overview information for all the reference files. For each file, one record is listed containing the following: reference subfile name, highest security classification of any data in each subfile, date and time of the last file update, and totals for active and canceled records (See Appendix B for sample reports).

5.3.5.4.2 Session Summary/Update Report

This report lists the add, change, and delete transactions that took place during a user session (See Appendix B for sample reports). Change transactions are reported as before and after images of records updated during a session. The reports provided are described below:

1. **Harbor Session Update Report**. Extracts all adds, changes, and deletes after reduction to the Harbor Information table. Details include geographic location code, harbor ID, wharf ID, dimensions (depth, diameter, and height), harbor type and code, and remarks.

2. **Seaport Session Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Information table. Details include geographic location code, port ID, harbor ID, wharf ID, DMA chart number, category code, world port index number, priority, location of nearest airfield, distance to nearest airfield, capacity adequacy, holding area quality, tugboat maximum horsepower, POL lighter carrying capacity, largest vessel (by deadweight capacity) that can be repaired, wharf cargo storage holding area, container stuffing/unstuffing area, width between rail tracks, cargo capacity (daily source, STONs, and MTONs), month ice breaks, month ice forms, tidal rise, container storage capacity, potable water storage capacity volume, remarks, capacity data review date, and seaport data review (by analyst) date.

3. **Seaport Anchorage Session Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Anchorage Information table. Details include geographic location code, harbor ID, wharf ID, anchorage class, berth quantity, and remark.

4. **Seaport Berth Depth Session Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Berth Depth Information table. Details include geographic location code, harbor ID, wharf ID, berth type (by depth), and berth length.

5. **Seaport Cargo Capacity Session Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Cargo Capacity Information table. Details include geographic location code, harbor ID, wharf ID, discharge capacity (MTONs, STONs, square feet, and source), storage capacity (MTONs, STONs, and source), open storage capacity (square feet, source), maximum length, and minimum depth.

6. **Seaport Channel Session Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Channel Information table. Details include geographic location code, harbor ID, wharf ID, channel number and name, dimensions (length, width, depth, and overhead clearance), and remark.

7. **Seaport Clearance Session Update Report.** Extracts all adds, changes, and deletes after

reduction to the Seaport Cargo Clearance Information table. Details include geographic location code, harbor ID, wharf ID, transport mode, cargo clearance rate (STONs), quantity available, and remark.

8. **Seaport Craft Session Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Craft Information table. Details include geographic location code, harbor ID, wharf ID, craft type, and craft quantity.

9. **Seaport Crane Session Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Crane Information table. Details include geographic location code, harbor ID, wharf ID, crane type, crane weight, and crane quantity.

10. **Seaport Floating Crane Session Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Floating Crane Information table. Details include geographic location code, harbor ID, wharf ID, crane ID, quantity, and lift capacity.

11. **Seaport MHE Session Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport MHE Information table. Details include geographic location code, harbor ID, wharf ID, material handling equipment code, weight, and quantity.

12. **Seaport Remark Session Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Remark Information table. Details include geographic location code, harbor ID, wharf ID, line number, and remark text.

13. **Seaport Standard Berth Session Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Standard Berth Information table. Details include geographic location code, harbor ID, wharf ID, berth class, sequence ID, and quantity.

14. **Seaport Structure Session Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Structure Information table. Details include level ID, description, channel count, number of ramps, electricity code, water code, cargo code, berthing space length, storage are (open, breakbulk, refrigerated, and ammunition), storage capacity (refined and crude oil, crude oil alone, and POL products), and discharge rate.

15. **Wharf Session Update Report.** Extracts all adds, changes, and deletes after reduction to the Wharf Information table. Details include geographic location code, harbor ID, wharf ID, wharf code, and pipelines (capacity in barrels/day, quantity).

16. **Wharf Berth Session Update Report.** Extracts all adds, changes, and deletes after reduction to the Wharf Berth Information table. Details include geographic location code, harbor ID, wharf ID, berth ID, cargo code, dimensions (length, width, and depth), and alternate uses (1st, 2nd, and 3rd).

17. **Wharf Container Storage Session Update Report.** Extracts all adds, changes and deletes after reduction to the Wharf Container Storage Information table. Details include

    geographic location code, harbor ID, wharf ID, and container storage (storage area, holding area,

stacking count, and percent used).

18. **Wharf Equipment Session Update Report.** Extracts all adds, changes, and deletes after reduction to the Wharf Equipment Information table. Details include geographic location code, harbor ID, wharf ID, equipment type, quantity, capability, and description.

5.3.5.4.3 Cycle Summary/Update Report

This report, which runs from the Network or Reports function, shows the update activity that took place during a complete update cycle. It is similar in format to the Session Update Report with some differences. First, the Cycle Update Report displays the reduced update transactions that took place during the update cycle; whereas, the Session Update Report shows the update transactions that took place during a session. The Cycle Update Report summary page shows the total number of update and reduced update transactions, and the Session Update Report shows only the total number of update transactions (See Appendix B for sample report). The reports provided are described below:

1. **Harbor Cycle Summary/Update Report**. Extracts all adds, changes, and deletes after reduction to the Harbor Information table. Details include geographic location code, harbor ID, wharf ID, dimensions (depth, diameter, and height), harbor type and code, and remark.

2. **Seaport Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Information table. Details include geographic location code, port ID, harbor ID, wharf ID, DMA chart number, category code, world port index number, priority, location of nearest airfield, distance to nearest airfield, capacity adequacy, holding area quality, tugboat maximum horsepower, POL lighter carrying capacity, largest vessel (by deadweight capacity) that can be repaired, wharf cargo storage holding area, container stuffing/unstuffing area, width between rail tracks, cargo capacity (daily source, STONs, and MTONs), month ice breaks, month ice forms, tidal rise, container storage capacity, potable water storage capacity volume, remarks, capacity data review date, and seaport data review (by analyst) date.

3. **Seaport Anchorage Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Anchorage Information table. Details include geographic location code, harbor ID, wharf ID, anchorage class, berth quantity, and remark.

4. **Seaport Berth Depth Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Berth Depth Information table. Details include geographic location code, harbor ID, wharf ID, berth type (by depth), and berth length.

5. **Seaport Cargo Capacity Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Cargo Capacity Information table. Details include geographic location code, harbor ID, wharf ID, discharge capacity (MTONs, STONs, square feet, and source), storage capacity (MTONs, STONs, and source), open storage capacity (square feet, source), maximum length, and minimum depth.

6. **Seaport Channel Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Channel Information table. Details include geographic location code, harbor ID,

wharf ID, channel number and name, dimensions (length, width, depth, overhead clearance), and remark.

7. **Seaport Clearance Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Cargo Clearance Information table. Details include geographic location code, harbor ID, wharf ID, transport mode, cargo clearance rate (STONs), quantity available, and remark.

8. **Seaport Craft Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Craft Information table. Details include geographic location code, harbor ID, wharf ID, craft type, and craft quantity.

9. **Seaport Crane Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Crane Information table. Details include geographic location code, harbor ID, wharf ID, crane type, crane weight, and crane quantity.

10. **Seaport Floating Crane Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Floating Crane Information table. Details include geographic location code, harbor ID, wharf ID, crane ID, quantity, and lift capacity.

11. **Seaport MHE Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport MHE Information table. Details include geographic location code, harbor ID, wharf ID, material handling equipment code, weight, and quantity.

12. **Seaport Remark Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Remark Information table. Details include geographic location code, harbor ID, wharf ID, line number, and remark text.

13. **Seaport Standard Berth Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Seaport Standard Berth Information table. Details include geographic location code, harbor ID, wharf ID, berth class, sequence ID, and quantity.

14. **Seaport Structure Cycle Update Report**. Extracts all adds, changes, and deletes after reduction to the Seaport Structure Information table. Details include level ID, description, channel count, number of ramps, electricity code, water code, cargo code, berthing space length, storage are (open, breakbulk, refrigerated, ammunition), storage capacity (refined and crude oil, crude oil alone, POL products), and discharge rate.

15. **Wharf Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Wharf Information table. Details include geographic location code, harbor ID, wharf ID, wharf code, and pipelines (capacity in barrels/day, quantity).

16. **Wharf Berth Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Wharf Berth Information table. Details include geographic location code, harbor ID,

    wharf ID, berth ID, cargo code, dimensions (length, width, and depth), and alternate uses (1st, 2nd, and 3rd).

17. **Wharf Container Storage Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Wharf Container Storage Information table. Details include geographic location code, harbor ID, wharf ID, and container storage (storage area, holding area, stacking count, and percent used).

18. **Wharf Equipment Cycle Update Report.** Extracts all adds, changes, and deletes after reduction to the Wharf Equipment Information table. Details include geographic location code, harbor ID, wharf ID, equipment type, quantity, capability, and description.

5.3.5.4.4 Input Transaction Listing (CNO)

This report lists all input transaction records that were loaded from a JRS transaction file (See Appendix B for sample report). This report runs automatically after input transactions are loaded during a batch update.

5.3.5.4.5 JRS Edit/Error Report (CNO)

The JRS Edit Report lists JRS-formatted input records that were loaded into a reference file. The JRS Error Report shows invalid records that were rejected during that load (See Appendix B for sample report).

5.3.5.4.6 Input Transaction Error Listing (CNO)/(DIA)

These reports list all input transaction error records that were rejected during a load into a reference file. The report runs automatically after input transactions are loaded during a batch update. This report is similar in format to the Input Transaction Listing Report (See Appendix B for sample report).